DOCUMENT RESUME

ED 088 270	EC 061 388

TITLE	Auditory Perceptual and Language Development Training Program. Final Project Report 1969-1972.
INSTITUTION	Boise City Independent School District, Idaho.
SPONS AGENCY	Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.; Idaho State Dept. of Education, Boise.
REPORT NO	22-70-0013
PUB DATE	[72]
NOTE	169p.
EDRS PRICE	MF-$0.75 HC-$7.80
DESCRIPTORS	*Auditory Perception; Clinical Diagnosis; Diagnostic Teaching; *Exceptional Child Education; Identification; *Language Development; Language Handicapped; *Learning Disabilities; Perceptual Development; Perceptually Handicapped; Primary Grades; Program Descriptions; *Program Evaluation; Regular Class Placement; Remedial Instruction; Screening Tests; Speech Therapists
IDENTIFIERS	Elementary Secondary Education Act Title III; ESEA Title III; Idaho

ABSTRACT

Terminally evaluated was a 3-year (1969-1972) Title III Idaho project to develop an auditory perceptual and language development training program involving the screening of 657 children in grades 1 and 2 in four schools and a first grade demonstration class for 192 perceptually handicapped children. Of 346 children identified to have auditory imperception, 48 Ss (16 experimentals, 16 controls, and 16 alternates) were selected as participants from each school. A speech/hearing clinician in each school administered audiometric, speech, language, and reading/spelling tests; and trained experimental Ss (in groups of two) 1/2 hour per day 4 days per week in sequential motor, auditory, and visual perceptual tasks; and phonics. The following were among effective project outcomes: employing speech and hearing clinicians for diagnosis and remediation, conducting remediation classes in project schools so the Ss could remain in regular classes, providing workshops on auditory learning problems, and conducting inservice training for project teachers and clinicians. Findings from tests such as the Wepman Auditory Discrimination Test indicated comparable gains by experimentals in all schools. Findings from the demonstration class showed gains greater than regular first grade gains on tests such as the Metropolitan Readiness Test. Visitors wrote impressions of the project. Cultural and nonpublic agencies participated. Dissemination activities included a handbook on child development potential. (Appendixes contain items such as test forms, a training program profile, a teacher questionnaire, and Yale charts.) (MC)

ED 088270

AUDITORY PERCEPTUAL and LANGUAGE DEVELOPMENT TRAINING PROGRAM

TITLE III

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ESEA GRANT 69-10 70-13

FINAL PROJECT REPORT

1969 - 1972

Submitted by

SPEECH, HEARING, and LANGUAGE DEPARTMENT
THE INDEPENDENT SCHOOL DISTRICT OF BOISE CITY

Boise, Idaho 83702

EC 061388

ED 088270

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

ESEA TITLE III 89-10 70-13

FINAL PROJECT REPORT

1969 - 1972

SUBMITTED TO
STATE DEPARTMENT OF EDUCATION
STATE OFFICE BUILDING
BOISE, IDAHO

SUBMITTED BY:

Elsie M. Geddes
Elsie M. Geddes
Project Director

Dorothy D. Secord
Dorothy D. Secord
Grant Administrator

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Project Coordinator	Ethel S. Jordan
Project Clinicians:	
Hillcrest School	Allen D. Renshaw
Jefferson School	Michael Anderson
Koelsch School	John B. Clark
McKinley School	Kenna Worthington
Research Specialist	Lee J. Hendrix
Project Secretary	Erma McKay

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PART I

STATISTICAL REPORT

ESEA TITLE III PROJECT APPLICATION
PART I

STATISTICAL DATA

Elementary and Secondary Education Act, Title III, P.L. 89-10, As Amended

SECTION A - General Project Information

1. REASON FOR SUBMISSION OF THIS FORM (Check one)

a. ☐ INITIAL APPLICATION FOR TITLE III GRANT

b. ☐ APPLICATION FOR CONTINUATION GRANT
If Application for Continuation Grant is preceded by Planning Grant, give:
1. Grant No. 70-13
2. Period: From 8/1/69 To 9/30/72

c. ☒ END OF PROJECT REPORT
Project Number 89-10 70-13

2. MAJOR DESCRIPTION OF PROJECT:

Check one category below which best describes your project. If categories do not apply, check Not Applicable.

a. ☒ Central City

b. ☐ Geographically Isolated

c. ☐ Programs for Minority Groups

d. ☐ Pre-Kindergarten Program

e. ☐ Not Applicable

3. PROJECT TITLE (5 words or less)
Auditory Perceptual and Language Development Training Program

4. NAME OF APPLICANT (Local Educational Agency)
Boise Independent School District #1

5. ADDRESS (Number, Street, City, State, Zip Code)
1207 Fort Street
Boise, Idaho 83702

6. NAME OF COUNTY
Ada

7. CONGRESSIONAL DISTRICT

8. NAME OF PROJECT DIRECTOR
Elsie M. Geddes

9. ADDRESS (Number, Street, City, Zip Code)
1207 Fort Street
Boise, Idaho 83702

PHONE NUMBER
342-4543 Ext.215
AREA CODE
208

10. NAME OF PERSON AUTHORIZED TO RECEIVE GRANT (Please type)
Dorothy Secord

11. ADDRESS (Number, St., City, Zip Code)
1207 Fort Street
Boise, Idaho 83702

PHONE NUMBER
342-4543
AREA CODE
208

12. POSITION OR TITLE
Clerk - Treasurer

I hereby certify that the information contained in this application is, to the best of by knowledge, correct and the local educational agency named above has authorized me as its representative to file this application.

SIGNATURE OF PERSON AUTHORIZED TO RECEIVE GRANT
Dorothy D. Secord

DATE SUBMITTED
November 1, 1972

13. MAINTENANCE OF FISCAL EFFORT - AVERAGE PER PUPIL ADA / / OR ADM. / / EXPEND. OF NON-FEDERAL FUNDS

a. SECOND PRECEDING YEAR FISCAL YEAR ENDING JUNE 30,______ $

b. PRECEDING YEAR FISCAL YEAR ENDING JUNE 30,______ $

c. ESTIMATED CURRENT BUDGETED EXPENDITURES FISCAL YEAR ENDING JUNE 30,______ September 30, 1972 $

14. LIST THE NUMBER OF EACH CONGRESSIONAL DISTRICT SERVED 1

15. TOTAL NUMBER OF LEA'S SERVED 2 or more

SECTION B - Title III Budget Summary for Project

1.	PREVIOUS GRANT NUMBER	BEG. DATE (Mo., Year)	END DATE (Mo., Year)	FUNDS REQUESTED
a. Initial Application or Resubmission	70-13	7-1-69	7-30-70	$12,929.87
b. Application for First Continuation Grant	70-13	7-1-70	6-30-71	82,608.39
c. Application for Second Continuation Grant	70-13	7-1-71	9-30-72	74,874.00
d. Total Title III Funds				$170,142.26

2. COMPLETE THE FOLLOWING ITEMS ONLY IF THIS PROJECT INCLUDES IMPROVEMENTS TO SITES, REMODELING, OR LEASING OF FACILITIES FOR WHICH TITLE III FUNDS ARE REQUESTED. LEAVE BLANK IF NOT APPROPRIATE.

TYPE OF FUNCTION	TITLE III FUNDS REQUESTED
a. REMODELING ($2,000 or less)	$
b. REMODELING (over $2,000)	$
c. LEASING	$2,520.00
d. IMPROVEMENTS TO SITES	$

SECTION C - Total School Enrollment and Project Participants

1.		PRE-K	KINDER-GARTEN	GRADES 1-6	GRADES 7-12	ADULTS (exclude teachers)	TEACHERS ENGAGED IN IN-SERVICE TRAINING	TOTALS
a. School Enroll. in Geographic areas served	(1) Public		590	11,437	10,759		35	22,821
	(2) Non-Public		27	1,005	810		5	1,847
b. Persons Participating in project	(1) Public			660	0		35	695
	(2) Non-Public						5	5
	(3) Not Enrolled	Adults attending Consultant workshops				Teachers included 667		

2. TOTAL NUMBER OF PARTICIPANTS 703.

Participants in Consultant Workshops 667

SECTION C (Continued)

3. RURAL/URBAN DISTRIBUTION OF PARTICIPANTS

PARTICIPANTS	RURAL		METROPOLITAN AREA		
	Farm	Non-Farm	Central-City Low-Socio-Econ. Area	Other Central City	Other Urban
Percent of Total Number Served (Based on Total Number in Sec. Clb.)					

SECTION D - Title III Project Staff - All Projects Active During Fiscal Year
Personnel Paid by Title III Funds

TYPE OF PAID PERSONNEL	Reg. Staff Assigned to Project				New Staff Hired for Project			
	Number Full-Time	Part-Time		TOTAL FULL TIME EQUIV. (Col. 2+4)	NO. FULL-TIME	Part-Time		TOTAL FULL-TIME EQUIV. (Col. 6+8)
		No. of PERSONS	FTE			No. of PERSONS	FTE	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. ADMINISTRATION/ SUPERVISION		1						1
2. TEACHER:								
(a) Pre-Kindergarten								
(b) Kindergarten								
(c) Grades 1-6								
(d) Grades 7-12								
(e) Other								
3. SUBJECT MATTER SPECIALISTS (Artists Scientists, Musicians etc.)								
4. TECHNICIANS (Audio-Visual, Computer, Specialists, etc.)								
5. PUPIL PERSONNEL WORKERS (Counselors, Social Workers, Psychologists, Attendance Workers)	5							5
6. MEDICAL AND PSYCH. PERSONNEL								
7. RESEARCHERS, EVALUATORS								
8. PLANNERS AND DEVELOP.								
9. DISSEMINATORS (Writer Publ Rel Personnel, Editors, etc.)								
10. Other Professional								
11. Para-Professional, Teacher Aides, etc.								
12. Other Non-Prof. (Cler., Bus Drivers, etc.)	1							1

Services Offered, Persons Directly Served, and Estimated Cost of Services - All Projects Active During
Fiscal Year - Total Number of Participants (Persons May be Counted More Than Once)

MAJOR PROGRAMS OR SERVICES	NUMBER OF PUPILS BY GRADE LEVEL PRE-K	K	1-6	7-12	NO. OF NON-PUB. PUPILS	ADULT	TEACHER'S RECEIVING IN-SERVICE TRAINING	ESTIMATED COST (amt. may overlap)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Develop, Plan, Eval, or Dissem. Activities								
2. Better Util of Inserv Ed of Instr Personnel								
3. Prog for Instit Improv (Org. Admin. Mtg.)								
4. Educ. Centers Serving a Large Area								
5. Improv or Expand Curr								
Arts (Music Theater etc)								
Language Arts								
Foreign Languages								
Mathematics								
Science								
Soc. Stds/Humanities								
Vocational/Ind. Arts								
Other - Specify ______								
6. Educ. Technology Media								
Computers								
TV/Radio								
Other - Specify ______								
7. Improv Classroom Instr.								
Flex Sched, Ind. Instr.								
Other - Specify ______								
8. Remed. & Spec. Education								
Handicapped								
Gifted								
Remedial Reading								
Speech and Hearing			660				35	
Other - Specify ______							4	
9. Pupil Person. Services								
Guidance								
Social Work								
Health								
Psychological								
Attendance								
10. Comm. Serv. or Partic.								
11. Meet. Crit Educ Needs								
Central City						667		
Geograph, Isolated								
Minority Groups								
Early Childhood								
12. Summer Programs								

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
TITLE III 89-10 70-13

SCOPE OF PROJECT SERVICES

1969-1972

	Pilot Program	First Continuation	Second Continuation
Personnel in Project	2	7	7
Professional	2	6	6
Secretarial	½	1	1
Research Consultant			1
Schools Served	2	4	4
Students Served			
Screened			754
Identified	67	188	376
Diagnosed	67	188	192
Trained	16	64	64
Teachers in Project Schools	8	16	16
In-service training	20	30	35
Consultant Workshops	1	2	2
Participants	132	305	230
Presentations	11	15	31
College students	0	215	360
Administrators	60	62	70
Teachers groups	45	91	157
Parents	32	104	370
Other groups	80	170	340
Visitors to Project	0	27	80
Districts represented	0	7	9
Requests for Information	0	8	20

PART II

EVALUATION REPORT

PART II - EVALUATION REPORT

Agency: Boise Public Schools
1207 Fort Street
Boise, Idaho 83702

Project Number: Title III, ESEA Grant 89-10 70-13
Project Title: Auditory Perceptual And Language Development Training Program

Budget Period: July 1, 1969 - September 29, 1972

A. NARRATIVE

1. DEVELOPMENT OF THE PROJECT

At the beginning of each school year the speech and hearing clinicians of the Boise Public Schools administer screening tests for hearing acuity in grades, one, three, five, seven, and ten. When the screening tests are given in the elementary schools, the clinician takes the audiometer into the classroom and each child is given a screening test for hearing acuity. The intensity level is set at twenty-five decibels (ISO), and the tones are presented over the speech range of frequencies in each ear. In the secondary schools the hearing tests are given during the physical education class period.

The clinicians observed that many of the children who were tested had normal hearing acuity, but they could not lateralize. That is, they could not determine whether they were receiving the sound in the right ear or in the left ear. Many times they would point to the right ear when the tones over the whole range of frequencies were being presented in the left ear or visa versa. Inability to lateralize affects localization of sound in space, which interferes with the determination of the direction and the distance from which the sound originates.

Many other children had a latency in response to the sound. That is, they were extremely slow in responding to the sound when it was presented in either ear. This affects the speed at which auditory information can be processed. Children listening to a rapid speaker would hear the speech somewhat like Donald Duck talk, and it would be practically unintelligible to them.

Some children had difficulty in both lateralization and speed of response, and their problems in interpreting the information received through their ears were compounded.

Examination of the permanent record folders of these children revealed that in the majority of cases several hearing tests had been given at the request of teachers, and that all of the previous tests showed normal hearing acuity. It was noted also that these children had at least average intelligence, but they were low achievers in the classroom. Many of them had repeated or were repeating a grade.

The clinicians also noted that there were other children with a number of referrals for hearing tests who had average or above average intelligence, but were underachieving in the classroom. These children were given tests for auditory discrimination which usually showed them to be deficient in their ability to discriminate between speech sounds and, therefore, in their ability to interpret and comprehend spoken language.

The difficulty that all of these children encountered was not in their ability to receive auditory information, but it was in their ability to perceive it. Auditory perception involves more than hearing; it is the ability to process all incoming auditory information by organizing, interpreting, and integrating what is received through the ear.

Since young children learn language through listening and repeating what they hear, the auditory system is the primary avenue through which language is learned. Those children who do not develop auditory perceptual skills in their pre-school years do not comprehend or use language adequately, and they are almost certain to encounter serious academic difficulties in learning to read, write, and spell.

There were no training programs available in the Boise area to help these children overcome their auditory perceptual and language handicaps. They could not always be included in the speech therapy program, because they were not hard of hearing and they did not necessarily have defective speech sounds. Many of them were making some sound substitutions and/or had some omissions of speech sounds in their conversational speech, and they were enrolled in speech classes when there was space to include them. These children usually exhibited some motor-perceptual and visual perceptual dysfunctions to a degree as well as auditory and language deficits.

A review of the literature revealed that there were several guidelines available for the identification and diagnosis of children with auditory perceptual and language development problems, but there were few methods and materials for training these children that were available to classroom teachers or to remedial reading specialists. There were some structured training programs for perceptual-motor and visual perceptual handicaps, but there were few structured programs for training auditory perception and language development other than those being employed in classes for hard of hearing and deaf children. In fact, there was very little attention being given nationally to auditory perceptual and language development training, particularly within the public school environment.

It was evident that there was a great need to provide auditory perceptual and language development training of a specific nature for those children with normal hearing acuity who were exhibiting difficulties related directly to the delayed development of the basic auditory skills that are required for learning verbal language.

Consequently, the Speech, Hearing, and Language Department of the Boise Public Schools submitted an application for a Title III, ESEA, planning grant to study and implement the most effective methods possible for the identification, diagnosis, and training of those children exhibiting academic learning problems due primarily to disturbances in auditory perception and language development.

The grant was awarded and funded, and the initial planning began with gathering information, collecting materials, and developing a pilot program for the identification, diagnosis, and training of those children with a specific problem in auditory learning.

A one-page identification checklist of behavioral symptoms was prepared (Appendix A, Page 116), and specific diagnostic tests were selected for a differential diagnosis of each child that was identified by the classroom teacher as having learning disabilities. A teacher evaluation questionnaire was constructed for the classroom teacher to complete for each child in the program prior to the implementation of the training and again at the termination of the program. A structured, sequential, developmental training program with a primarily auditory approach to language development was planned by the project coordinator.

Two elementary schools in the city were selected to participate in the pilot program. Four classes in grades one, two, three, and four respectively were designated by the principal at each school as project classes.

The project teachers were given the identification checklists of behavioral symptoms to complete for those children that they observed in their classrooms as having difficulty in the specific areas designated on the checklist.

The teachers returned the completed checklists to the speech and hearing clinicians, who administered specific diagnostic tests to each child to determine the nature and extent of the perceptual and language deficits.

Upon completion of the diagnostic testing, those children who exhibited primarily auditory perceptual and language disturbances were selected to participate in the training program. Individual conferences were held with the teachers and parents of those selected children. The learning problems were explained, and suggestions were made for helping the children in the classroom and at home. The parents were asked to complete a developmental history form and to sign a permission slip for their children to participate in the program.

Classes were organized at each school with two children in each class. The training program was conducted by speech and hearing clinicians four days a week for one-half hour each day for fourteen weeks.

At the conclusion of the pilot program post-tests were administered to determine the progress of each child. This was accomplished by retesting with the same tests used for the pre-testing, comparing the scores, and superimposing the post-test graphs upon the pre-test graphs. The purpose of the pilot program was not primarily to gather statistical data as a research project, but to allow each child to act as his own control.

The results of the training as shown by comparison of pre-test and post-test scores were significant for all of the children that participated in the program. Most of the children in the first and second grades, particularly those in the first grade, made the transfer to the classroom activities,and their reading and spelling achievements raised to accepted grade levels. But the children in the third and fourth grades did not make the transfer to the extent that they became noticeably more competent in following classroom procedures and accomplishing classroom objectives at accepted levels. All of these children were repeating or had repeated a grade, and they had so many firmly established bad habits that it was impossible to break them down and help them to build new ones in so short a period of time. Also these children had suffered so much failure that their self-concepts were extremely negative and they thought of themselves as "stupid" or "dumb". They were so insecure that they needed constant reassurance that they could learn, even though the program was structured and sequential and all of the activities were kept at a level low enough that they were experiencing success in all areas.

It was evident from these findings that learning problems are compounded by failure, and that prevention is infinitely more effectual than remediation.

Most of the training programs that have been developed for learning disabled children are diagnostic-remedial type programs, whereby the training is done only in the specific areas indicated by the diagnostic tests. However, the completed identification checklists, and the results of the diagnostic tests, clearly revealed that these children have difficulty to a greater or less degree in all three areas of development - motor, sensory, and language - even though there might be, and usually is, one area that is the primary area of dysfunction. These children differ widely in their individual patterns of abilities and disabilities, but there are several areas of difficulty that are common to most of them:

a. Poor body image

b. Poor kinesthetic perception

c. Poor tactile perception
d. Poor auditory perception
e. Poor visual perception
f. Poor visual-motor coordination
g. Poor spatial orientation
h. Poor figure-ground discrimination
i. Poor memory
j. Problems of integration
k. Developmental defects in speech and language

These associated difficulties make it almost impossible for these children to cope with the learning tasks for which they are not ready, developmentally. For some reason these children do not develop the motor, perceptual, and language skills naturally. They must be taught these skills, and the skills need to be integrated in the entire learning process. Therefore, remediating any one specific area will not solve the learning problems; it is the processing and continuous integration of all sensory information that lays the foundation for learning. These children can overcome their disabilities, but they have to go back and catch up on the important basic functions, and build language consistently and continuously to gain meaning from the activities involved in the training. They can do this successfully only if their difficulties are recognized early and an intensive training program is planned for them.

The program that was implemented in the pilot project begins with the development of the basic skills that form the structure for all future learning, and proceeds step by step in a sequential order.

It begins with the training of body image and body movements, the discrimination of color, form, gross sounds, and tone, and develops the language associated with all of the activities. An alphabetic-phonetic-structured-sequential method of teaching reading, writing, and spelling with a multi-sensory approach is employed and coordinated with a highly structured system of teaching written language. Cursive writing is employed from the beginning, and writing exercises are an integral part of the entire program. By introducing writing early, the children learn to read through writing. They are encouraged to write about themselves, their families, and their own experiences, and this stimulates interest and provides motivation for learning, as well as integrating the whole learning process.

Music is introduced later in the sequence to further develop listening skills and integrate them with motor skills.

The pilot project was so successful that an application for an operational grant was submitted. It was awarded and funded, and it provided for the expansion of the project to four schools in the Boise Public Schools. Portable classrooms were rented and set in place to provide space for adequate classroom instruction. Speech and hearing clinicians conducted the program with two children in each class one half hour each day four days each week at each of the project schools. The methods and materials employed in the training program were essentially the same as those used in the pilot project with the addition of some recently released commercial materials which enhanced the program.

The Title III ESEA Evaluation Team visited the project in the spring of the 1971 school year, and made many favorable commendations and some recommendations to augment the program for the second year of operation. One specific recommendation was that data be collected, compiled, and analyzed for research purposes. This recommendation was followed, and the services of a research specialist were contracted. The research design did not cause any major changes in the program, nor did it alter the basic purpose of the project.

The grade levels of the children participating in the program were changed from the first four grades to the first and second grades. This change was made in order to select children for experimental and control groups to assure accurate assessment of the program. Testing the numbers of children necessary to form experimental and control groups in four grades would have required too much time, since the project staff was made up of only four speech and hearing clinicians, a coordinator, and a director.

The identification of the children with auditory discrimination deficits was changed from teacher completion of the checklist of behavioral symptoms to screening all of the children enrolled in the first and second grades at the project schools with the Wepman Auditory Discrimination Test.

2. SPECIFIC OBJECTIVES AND ACTIVITIES

IDENTIFICATION

OBJECTIVE: *By September 10, 1971, the project clinicians will have identified all those children in the first and second grades in the four project schools who exhibit auditory imperception to a degree that it interferes with auditory learning.*

The project clinicians administered the Wepman Auditory Discrimination Test to all children in all of the first and second grades in the four project schools by September 14, 1971. The test was given to 657 children, and it was found that 346 (52%) children exhibited auditory imperception to the degree that it interferes with auditory learning. Identification was made on the basis of age norms determinded by error scores on the test.

The research specialist, Dr. Lee Hendrix from Brigham Young University, visited the project on September 16, 1971. He and the project clinicians selected the children to participate in the Auditory Perceptual and Language Development Training Program from the identified population by grouping according to age norms to form experimental and control groups. The ratio of boys and girls in each group was the same. Alternates were also selected for each group.

Forty-eight children were randomly selected from the first and second grades at each project school.

a. Sixteen children were selected for the experimental group to participate in the training program.

b. Sixteen children were selected for the control group, and they did not receive any type of specialized training.

c. Sixteen children were selected as alternates for the experimental and the control groups.

The children selected to participate in the program were scattered throughout all first and second grades in each of the project schools. The teachers were not informed which children were included in the control group in order to prevent any differential treatment.

Every teacher in the first and second grades at each project school was given a Teacher Evaluation Questionnaire to complete for each child in the project prior to the implementation of the training, and they were given the same questionnaire to complete for each child at the conclusion of the program. By following this type of research design, it was possible to make a four-way comparison of the results of the training program, and determine the progress made in each of the following groups:

1. Children in the training program in project teachers' classrooms.
2. Children in the training program in non-project teachers' classrooms.
3. Children not in the training program in project teachers' classrooms.
4. Children not in the training program in non-project teachers' classrooms.

The research design and related instruments are included in Part B, Effectiveness of the Program, Pages 64-71.

DIAGNOSIS

OBJECTIVE: *By November 20, 1971, the project clinicians will have administered specific diagnostic tests to all children selected to participate in the program. Psychological evaluations will be made by contracting the services of a psychologist when deemed advisable by the project clinician.*

The project clinicians administered the specific diagnostic tests to all of those children randomly selected for the experimental group, the control group, and the alternate group in the project on the basis of auditory imperception as determined by the Wepman Auditory Discrimination Test. Psychological evaluations were made by contracting the services of a psychologist when deemed advisable by the project clinician.

The following specific diagnostic tests were administered to all children selected to participate in the program prior to November 20, 1971:

a. Pure-tone audiometric test.

Of the 192 children tested on the audiometer twenty-nine showed a degree of hearing loss, but the losses were not significant for auditory learning. The audiograms of those twenty-nine children are included in the project files. It was noted that thirty-five children exhibited some degree of difficulty in lateralization and/or had a latency in response. Twelve (34%) of those children were included in the experimental group.

b. Speech test.

All 192 children were given an articulation test, and the sound substitutions and/or omissions, as well as the defective speech sounds, were recorded on the speech inventory. Thirty-two (17%) of those children exhibited a degree of speech difficulty, and fourteen (40%) of them were included in the experimental group. The speech records are contained in the project files.

c. Language test (ITPA).

Each child selected for the project was given the Illinois Test of Psycholinguistic Ability to determine the nature and extent of the delay in language development. Of the 192 children that were tested 123 (64%) showed language deficits in the auditory sub-tests severe enough to interfere with auditory learning. Fifty-two (42%) of those children were in the experimental group.

d. Reading and spelling test (WRAT).

Each child that participated in the project was given the Wide Range Achievement Test. Test results were recorded at first grade level and second grade level.

1. Reading

   Fifty-five children (29%) scored below grade level in reading: eighteen (33%) in first grade and thirty-seven (67%) in second grade.

2. Spelling

   Seventy-two children (38%) scored below grade level in spelling: twenty-two (30%) in first grade and fifty (70%) in second grade.

The test results of the identification and diagnostic procedures are shown in Table I Pages 21 and 22.

TABLE I

Major Categories of Identification and Diagnosis

1971 - 1972

	Total	Hillcrest	Jefferson	Koelsch	McKinley
A. Enrollment in 1st and 2nd Grades	657	142	187	142	186
1. Number screened with Wepman	657	142	187	142	186
2. Number identified - below age norms	346	96	68	73	109
% of enrollment	52%				
3. Number randomly selected for project	192	48	48	48	48
% of those identified	56%				
B. Diagnosis of those selected for project	192				
1. Hearing acuity (loss not significant)	29	1	9	8	11
Number in experimental group	5	0	0	0	5
a. Laterality and/or lag	35	9	12	0	14
Number in experimental group	12	2	4	0	6
% in experimental group	34%				
2. Speech problems	32	3	11	6	12
Number in experimental group	14	2	4	4	4
% in experimental group	40%				
3. ITPA - auditory deficits (below -6)	123	37	35	27	24
Number in experimental group	52	15	15	11	11
% in experimental group	42%				
4. WRAT					
a. Reading-below grade level	55	13	12	18	12
1. Number in first grade	18	4	2	7	5
% in first grade	33%				
Number in experimental group	8	2	0	3	3
% in experimental group	15%				

4. WRAT (cont.)	Total	Hillcrest	Jefferson	Koelsch	McKinley
2. Number in second grade	37	9	10	11	7
% in second grade	67%				
Number in experimental group	21	5	6	6	4
% in experimental group	38%				
b. Spelling - below grade level	72	17	22	17	16
1. Number in first grade	22	4	9	5	4
% in first grade	30%				
Number in experimental group	10	2	4	2	2
% in experimental group	14%				
2. Number in second grade	50	13	13	12	12
% in second grade	70%				
Number in experimental group	24	7	5	6	6
% in experimental group	30%				

Note: 64% of the 192 children selected randomly on basis of error scores on the Wepman Auditory Discrimination Test also fell below the standard deviation on at least one of the auditory sub-tests on the ITPA.

Note: There is a significant increase in the number of children falling below grade level in both reading and spelling at second grade level.

TRAINING

OBJECTIVE: *By May, 1972, those children selected for the auditory perceptual and language development training classes will have made significantly greater gains in listening skills and language development than those children in the control group. This achievement level will be determined by pre-test and post-test scores on the diagnostic tests, and by the classroom teacher observations and completion of a prepared checklist. The Teacher Evaluation Questionnaire will be given to the teachers prior to the implementation of the training and again at the completion of the training program to determine the degree of noticeable improvement in listening skills and language development in the classroom.*

The project clinicians completed the diagnostic testing procedures, held individual conferences with the classroom teachers and individual conferences with the parents of those children selected for the experimental group, and organized the classes for the training program by November 19, 1971. The training began at all project schools on November 22, 1971. Since some of the children had multiple deficit areas in auditory perception and language development, grouping was done within the best limits possible with two children in each group.

The training sessions were conducted for one-half hour each day for four days a week at each project school. This schedule allowed the children receiving therapy to remain in the regular classroom, but to receive consistent and continuous specialized training for auditory perception and language development.

One speech and hearing clinician was assigned to each project school full time. This arrangement allowed for teacher and parent conferences at the end of the school day and on Friday mornings. It also allowed time for the clinician to visit the classrooms, and for the classroom teachers to discuss the children's learning problems with the clinician. The classroom teachers were encouraged to visit the project classes whenever possible. The project clinicians spent Friday afternoons in workshops and planning sessions.

Since it was found that the children that participated in the program exhibited dysfunctions to a degree in all areas in the sequence of development, as well as the primarily auditory area, the sequential developmental program that was implemented in the pilot program, which included training in the motor, sensory, and language areas with an emphasis on the auditory approach to learning, was employed throughout the continuation program.

The procedures include motor perceptual, auditory perceptual, and visual perceptual training, developing auditory and visual memory and language continuously. The activities for the development and integration of the motor, auditory, and visual perceptual skills begin with those basic skills that form the foundation for learning, and proceed from the simple to the complex, gross to fine, and concrete to abstract. This type of sequential developmental program is literally a diagnostic teaching approach and provides for the detection and correction of any deviancy that might cause future learning problems. Emphasis is placed upon the development of receptive and expressive language as the training continues in a step by step progression.

a. Motor perceptual training begins with gross movements, developing body image, coordination, laterality and directionality.

b. Auditory perceptual training begins with the discrimination of gross sounds and environmental sounds and discrimination of tones, and proceeds to the discrimination of speech sounds, sounds in words, and words in sentences in quiet and with background noise. Training is also done for localization of sound in space. All auditory training is done initially in quiet surroundings with teacher-child relationship, and continues on progressive levels to the discrimination of sound in noise on prerecorded tapes and to taped programs requiring a visual-motor response. Some of the tapes used in the program were produced in other Title III projects, some were developed by the project clinicians, and the others were part of complete auditory training programs which were produced commercially.

c. Visual perceptual training begins with three dimensional objects and proceeds to their two dimensional representations. The exercises follow the sequence of perceptual and conceptual development:

(1) Match
(2) Identify
(3) Name
(4) Trace
(5) Copy
(6) Reproduce
(7) Describe

The concrete objects, and their representational forms, provide the framework for the discrimination of color, form, color and form combined, dimension, horizontal and vertical planes, size, length, width, height, weight, thickness, speed, distance, time, volume, and number. Activities are also included for the training of touch, taste, and smell. The language associated with all perceptual training is developed consistently and continuously, and includes auditory and visual reception, auditory and visual association, and verbal expression. Complete sentences are elicited for all responses to train the children to formulate a statement in proper syntax.

d. The phonic program is structured and sequential. It is an alphabetic-phonetic-linguistic-multi-sensory approach, employing both manuscript and cursive letters. The letters are on 6" x 9" pieces of heavy cardboard. The manuscript letter is on one side of the card and the cursive letter is on the other side of the card. The manuscript letter is used to name the letter, and the cursive letter is used for tracing, while the sound is produced simultaneously. This type of approach provides for the integration of the visual, auditory, kinesthetic, and tactile processing, which is so essential in the phonic training, and develops attention, retention, and recall. Each phoneme/grapheme is introduced through a sequence of seven steps similar to those presented by Mildred McGinnis in her Association Method*:

*Aphasic Children, Mildren A. McGinnis, The Volta Bureau, Washington, D.C. 20007, 1963

1. Name the manuscript letter.
2. Trace and sound cursive letter simultaneously.
3. Copy cursive letter on chalkboard.
4. Identify cursive letter from visual stimulus.
5. Identify cursive letter from auditory stimulus.
6. Produce sound from memory, following visual stimulus.
7. Write letter from auditory stimulus.

After four sounds (three continuant consonants m, f, and s and one short vowel -a-) are introduced through the seven steps, blending of the consonant-vowel, vowel-consonant, and consonant-vowel-consonant combinations is begun. Each new phoneme is introduced through the same sequence until all of the voiceless consonants and the five short vowels have been introduced and used in the blending process in consonant-vowel-consonant combinations. The Yale Charts*, which are phonovisual and are structured scientifically on a phonetic base utilizing traditional orthography, are introduced. Copies of the charts are in the Appendix B Pages 134-135. The remaining phonemes/graphemes with their secondary spellings are introduced through the sequence until all have been mastered. The Yale Charts are kept in view for ready reference. This structured-sequential-linguistic approach to phonics provides systematic drill in all perceptual areas. It utilizes the stronger modality of visual perception for support until the auditory perception is developed sufficiently for adequate functioning, and then the visual clues are gradually withdrawn.

*Formation and Development of Elementary English Sounds, Carolyn A. Yale, Northampton, Mass: The Clarke School for the Deaf, 1914

The manipulation of the letter cards provides an excellent means of training for:

1. Auditory and visual discrimination
2. Auditory and visual sequencing
3. Auditory and visual synthesis
4. Auditory and visual closure
5. Auditory and visual analysis
6. Auditory and visual memory

By utilizing the Yale Charts, which are designed to provide a phonovisual representation of the phoneme/graphemes and their secondary spellings for continuous reference, following the drills with the letter cards, the necessity for presenting phonic "rules" is eliminated. Exceptions to the chart spellings are taught as they occur in vocabulary building.

As the children recognize word meanings from the combinations of sounds, the words are associated with the objects, actions, and/or feelings that they represent. In this way a spoken and written vocabulary is built as the phonic program progresses, and reading and spelling are learned through writing. Strip charts are made on which to record and classify the words and phrases as they are introduced under specific headings, which later supply the initial cues for asking questions:

How many: *What color:* *Who:* *What:* *Where:*

Examples of the strip charts are in Appendix B

Pages 136-141.

No basic readers are introduced until phonics have been mastered, and the ability to decode that major part of the language which is phonetic has been developed. Then the Open Court Method of reading, which is also based on the system of phonetics structured on the Yale Charts, provides an excellent introduction to text-book reading, and also provides a correlated language arts program. However, the phonic skills learned in this program combined with any resource reading materials, which follow a developmental reading program, provide a firm foundation for the normal child as well as the perceptually impaired child.

e. The structured language program is based upon Edith Fitzgerald's Straight Language for the Deaf*.

The Key words and symbols are painted with yellow poster paint at the top of the chalkboard, where they are always visable for ready reference, and act as a guide to straight language.

In the beginning only *Who:* ═══ (verb symbol) are painted on the chalkboard. Chalk lines are drawn vertically 16" apart on the chalkboard. At first only the subject and intransitive verbs are introduced.

The teacher gives an oral command, "Run", to a child. He executes the command (experiences the action), and then stands with his back to the chalkboard under the word *Who:*. The teacher asks the question, "Who ran?" The child answers, "I ran."

---

*Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 20007, 1949

Another child talks to the child who performed and says, "You ran."

Then he turns around, uses the child's name and says, "___ ran."

The first child is given a second verbal command, "Walk."

The same procedure is followed, except the second child in describing the action uses the pronoun. "He (or "She) walked."

The pronoun and verb charts are begun with headings:

Pronouns	*Verbs*
Who:	
I	ran
You	walked
He	jumped
She	skipped

The plural pronouns are introduced by having two children perform an action simultaneously, and having each child in the group describe it:

___and I

We

___and___

They

The pronoun chart is built up as the pronouns are introduced or needed, and it serves as a ready reference when the child wants to use a specific pronoun in his expressive language later. The pronoun chart is included in Appendix B Page 142.

Several intransitive verbs are introduced through the same procedures, and all nominative pronouns are reviewed with the presentation of each new verb.

The written form of the command is presented on a card the day following the initial presentation. The teacher holds up the card, "Run." The child reads the command and performs the action. Then he stands with his back to the chalkboard under *Who:*, and describes the action.

Two children are asked to read and execute the command simultaneously for practice on plural pronouns.
The teacher points out that the command is in the present tense and the past tense is used after the action is completed.

The third Key word *What:* is added in the third column, and the direct object is introduced.
The teacher gives an oral command, "Throw a ball," The child executes the command, stands under the Key word *Who:*, and the teacher places the ball on the chalk ledge under the Key word *What:*.
The teacher asks the question, "What did you throw?" as she points to the Key word *What:*. The child says, "I threw a ball." A second child says to the first child, "You threw a ball." Then he turns around and says, "___threw a ball," using the child's name.
The teacher asks the question, pointing to the Key word *Who:* "Who threw a ball?"
The teacher asks a second question, pointing to the Key word *What:*. "What did____throw?"

The child answers in a complete sentence, using the prounoun, "___ threw a ball."

The teacher calls attention to the change in the form of the verb in the last question.

The new verb is written on the verb chart, and the noun is written on the new strip chart under *What:*.

Several transitive verbs are introduced through the same procedures, and the new words are placed on the charts for future reference.

The following day a written form of the command "Throw___" is presented.

The child reads and executes the command and then describes the action orally.

Two children are asked to read and execute the command for practice in the use of plural pronouns and nouns.

Several transitive verbs are introduced through the same procedures, and the new words are written on the charts for future reference.

Regular and irregular verbs are conjugated and then placed in verb boxes--an outline showing past, present, and future tenses in positive, negative, and interrogative forms.

Later the progressive forms are introduced through the use of pictures, and are added to the verb outlines.

Illustrations of the verb outlines in the verb boxes are in Appendix B Pages 143-149.

The fourth Key word *Where:* is then painted at the top of the fourth column and prepositional phrases, and words designating place, are introduced. Only one preposition is introduced at a time.

The teacher gives a command, "Put a book on a table." The child performs the action, stands under the Key word *Who:*, and describes the action as the teacher points to the Key words and symbols.

The teacher asks questions about each action, after it has been performed and described, as she points to the Key words on the chalkboard:

Who___________?
What__________?
Where_________?

The child answers in complete sentences.

Some additional questions might be:

"Where is the_____?"

"Is the____on a____?", using a wrong designation.

The question requiring the negative form is used to give the child practice in formulating negative statements.

The teacher explains that the verb sometimes reverses its position when the sentence changes from a declarative sentence to an interrogative sentence.

The child is taught to ask questions, as the teacher refers to the Key word, all through the sequence as the language building progresses.

The entire Key is built up by adding one Key word at a time, and the Key words and symbols painted at the top of the chalkboard serve as a constant guide to straight language.

In eliciting the proper syntax of a sentence through spontaneous speech, the teacher points to the appropriate Key words in sequence as the child speaks.

The child is encouraged to tell about himself, his family, and his own experiences.
As soon as his writing has progressed sufficiently, he is encouraged to write about himself, his family, and his experiences.

By following these procedures systematically and sequentially the child builds up a functional spoken and written language background. He learns to read through writing, and what he reads has particular meaning for him, because everything that he writes is within the range of his own experience.

Original statements and experience stories are not written on Key paper. The Key words and symbols, which are always visible at the top of the chalkboard, serve as the guide to straight language.

The Key paper, which shows the progression of the structure of the sentence, is in Appendix B Pages 150-155.

For the complete and detailed presentation of the method the reader is referred to Edith Fitzgerald's "Straight Language for the Deaf," Volta Bureau, Washington D.C. 20007, 1949.

EDUCATIONAL SERVICES

OBJECTIVE: *By May, 1972, at least four classroom teachers in grades one, two, three, and four in each project school will have attended in-service workshops conducted by the project director and project coordinator for three hours once a month for a period of eight months, and will have demonstrated some expertise in the identification and training techniques.*

The project director and the project coordinator conducted in-service workshops for the sixteen project teachers, all speech and hearing personnel, and five teachers from the parochial schools in Boise for three hours once a month for a period of eight months over the two year period of the operational grant. The project teachers had released time, and substitutes were paid out of Title III ESEA 89-10 70-13 funds.

During the first year of the continuation grant, the in-service workshops were devoted to the identification, diagnosis, and training of children with primarily auditory learning problems.

The project coordinator presented background information to create an awareness of the nature of a learning disability. The natural sequence of development in the normal child was presented, and the learning problems that might result from a breakdown in the sequence in any specific area were discussed. A detailed outline of the presentation was given to each participant.

The behavioral symptoms for identification of a child with a learning disability were described. A one-page checklist of behavioral symptoms that the teachers might use to identify and refer those children whom they suspected of having learning disabilities was presented and discussed. Several other identification check lists that had been developed elsewhere were also handed out to each participant.

The specific diagnostic tests that the clinicians used to make a differential diagnosis of each child that was identified were explained and demonstrated. This was done to enable the classroom teachers to understand the purpose of each subtest, and to communicate more effectively with the specialists who administer the diagnostic tests.

An assessement battery of tests that the classroom teachers might use for diagnostic purposes, in the absence of specialists, was explained and demonstrated. A complete outline of the test battery was presented to each participant.

The training procedures which had been found to be most effective in the prevention and/or remediation of perceptual problems, particularly auditory problems that lead to learning disabilities, were presented and demonstrated. The methods, materials, and strategies for each specific area, and the language related to each activity, were presented and demonstrated. A detailed outline of the procedures and strategies was presented to each participant. The materials, pamphlets, books, and catalogues that had been collected for the perceptual and language training were displayed. A complete bibliography of all the books, pamphlets, periodicals, and journals that had been collected for the Title III lending library was distributed.

The alphabetic-phonetic-structured-multi-sensory approach to phonics was explained and demonstrated, and the Yale Charts were introduced and explained.

A detailed outline of the procedures employed in the phonic method and copies of the Yale Charts were distributed to each workshop participant.

The structured method of teaching straight language, which was based upon Fitzgerald's "Straight Language for the Deaf" and is used as a guide to sentence structure in language building, was explained and demonstrated. A detailed outline of the step by step development of the Key to Straight Language, and the Key papers associated with each progressive step in building the Key, were given to each participant.

A bibliography of the pamphlets and books that relate specifically to the language program was included with the outline.

Following the presentation of the background information on child development, testing procedures, perceptual training, phonics, and language development, the remaining workshops were devoted to "feed back" from the workshop participants, in order to determine their accurate use of the identification measures and training techniques.

The teachers brought in suggestions for training auditory perception and the materials that they had developed and/or employed in their auditory training in their classrooms that they had found particularly interesting and beneficial in the training process.

The techniques were compiled and listed under headings for the training of auditory discrimination, localization, reception, association, and memory.

The materials utilized in the training were collected so that each participant had the manual and the materials for training listening skills.

Several prepared lists of training techniques and materials were distributed to the workshop participants for inclusion in their manuals for supplementary training in their classrooms.

In the second year of the continuation grant one-half of the workshop participants that were enrolled in the in-service training program were new to the project. Some of the project teachers were transferred to non-project schools, and some of the speech and hearing clinicians moved out of the state or resigned. All of these people were replaced by new personnel. This necessitated some repetition in orientation to auditory learning and language development.

Since the project clinicians had had one year of experience, a short introduction to each phase of the program was presented by the project coordinator, and then the participants formed groups on each grade level, and the project clinicians acted as group leaders. They demonstrated the techniques employed in each phase of the structured sequential program through the actual participation of the teachers in the exercises.

The materials necessary for the completion of the exercises were made in or collected for each workshop, so that each participant had the methods and materials ready for the training in the classroom upon completion of the workshops.

Films, which were directly related to each phase of the program that was being presented, were shown at the workshops. The films that were shown were:

"Early Recognition of Learning Disabilities"
"Teaching a Child to Talk"
"Administration of the ITPA"
"Why Billy Can't Learn"
"Bright Boy, Bad Scholar"
"Old Enough But Not Ready"
"I'm Not Too Famous At It"
"Oral Language -- Breakthrough to Reading"
"Joy of Learning"
"Visual Perception and Failure to Learn"
"Visual Training in the Regular Classroom"

At the conclusion of the in-service training the participants were asked to complete a prepared questionnaire on the effectiveness of the Title III project and the in-service training program.

All books, pamphlets, periodicals, and materials on loan from the Title III library were returned and retained in the Title III Project Office.

The complete and detailed outlines of the rationale of learning disabilities, identification of children with learning disabilities, the testing procedures and the training program, including the methods and materials as presented in the in-service training workshops, a complete bibliography, and a list of the sources for the materials used in the project are submitted in a separate booklet as a supplement to this final report.

The booklet is entitled, Developing A Child's Potential, (Copyright 1972 by Ethel S. Jordan) and is available through the Title III Office of Dissemination, State Department of Education, State Office Building, Boise, Idaho 83707.

DISSEMINATION

OBJECTIVE: *By the end of the project, information regarding the effectiveness of all materials and methods will be made available to all elementary teachers in the Boise Public Schools and in the private schools located within the district. Dissemination of information regarding the project beyond the Boise area is the responsibility of the Title III ESEA Office for Dissemination in the State Department of Education.*

The project director, the project coordinator, and the project clinicians have disseminated information regarding the development of the project and the methods and materials employed in the training program continuously by:

A. Arranging workshops that were conducted by nationally recognized consultants in the field of learning disabilities:

Doris Johnson, Director for Teacher Training for Learning Disabilities at Northwestern University, and co-author of the book entitled "Learning Disabilities-Educational Principles and Practices."

Dr. Jeanne McCarthy, Director of Diagnostic Services, Schaumburg School District #45, Hoffman Estates, Illinois, and Consultant on Learning Disabilities to the U.S. Office of Education.

Zee Swearengin, Assistant Professor, Special Education, University of New Mexico, and Hal Dobkins, Principal of Mark Twain School, Albuquerque, New Mexico.

Dr. Gerald Freeman, Director of the Oakland Schools Speech and Hearing Clinic, Pontiac, Michigan.

Dr. N. J. Christensen, Director of Speech and Hearing Center, University of Oregon, Eugene, Oregon.

The workshops were conducted at the Rodeway Convention Center, and invitations were sent to:

1. Project personnel and all participants in the in-service training workshops.
2. Selected personnel in local and surrounding colleges and universities.
3. Selected members of the medical profession in Boise.
4. Selected personnel in the State Department of Education.
5. Members of the Board of Trustees for Boise Public Schools.
6. Administrators, supervisors, counsellors, psychologists, and principals in Boise Public Schools.
7. Remedial reading teachers in Boise Schools.
8. Learning disability teachers in Boise Schools.
9. Selected optometrists and ophthalmologists in the Boise area.
10. Selected special education teachers from surrounding areas.

Evening meetings were held for parents, teachers, college students and all interested persons who wished to attend.

The day following the workshop at the Convention Center, the consultants conducted workshops in specific problem areas with the project personnel and all participants in the in-service training program. Mr. Hal Dobkins, Principal of the Mark Twain School in Albuquerque, New Mexico, spent one half day in a workshop with the elementary principals in the Boise Schools

B. Newspaper articles.

C. Television and radio interviews and releases.

D. Conferences with individuals interested in the project.

E. Conferences with individual parents.

F. Conferences with individual teachers.

G. Conferences with individuals by telephone--long distance

H. Program presentations:

1. PTA Meetings
2. Advisory Board and Project Directors--Title III State Department of Education.
3. Teachers in training at Boise State College and Northwest Nazarene College.
4. Members of Boise Junior League.
5. Board of Trustees of the Boise Public Schools.
6. Administrators of the Boise Public Schools.
7. Area Elementary Principals in the Boise Schools
8. State ASCD Meeting.
9. Advisory Council--Title I--Boise Schools

10. Parents of first grade entrants at McKinley School.
11. Teachers meetings at elementary schools in Boise.
12. State Speech and Hearing Conventions
13. Boise Chapter of the Council for Exceptional Children.

I. Visitations to the Project

Visitors to the project included U.S. Representative Orval Hansen; professors from Boise State College, Idaho State University, University of Idaho, and Northwest Nazarene College; members of Title III Advisory Board; members of the State Department of Education; members of the Board of Trustees; administrators and teachers from public schools in:

a. Boise, Idaho
b. Twin Falls, Idaho
c. Preston, Idaho
d. Potlatch, Idaho
e. Blackfoot, Idaho
f. Pocatello, Idaho
g. Wendell, Idaho
h. Arco, Idaho
i. Shoshone, Idaho
j. Idaho Falls, Idaho
k. Nampa, Idaho
l. Dietrich, Idaho
m. Rupert, Idaho
n. Plummer, Idaho
o. Lewiston, Idaho

Boise - Auditory Perceptual Language Development Training Program

VISIT Program

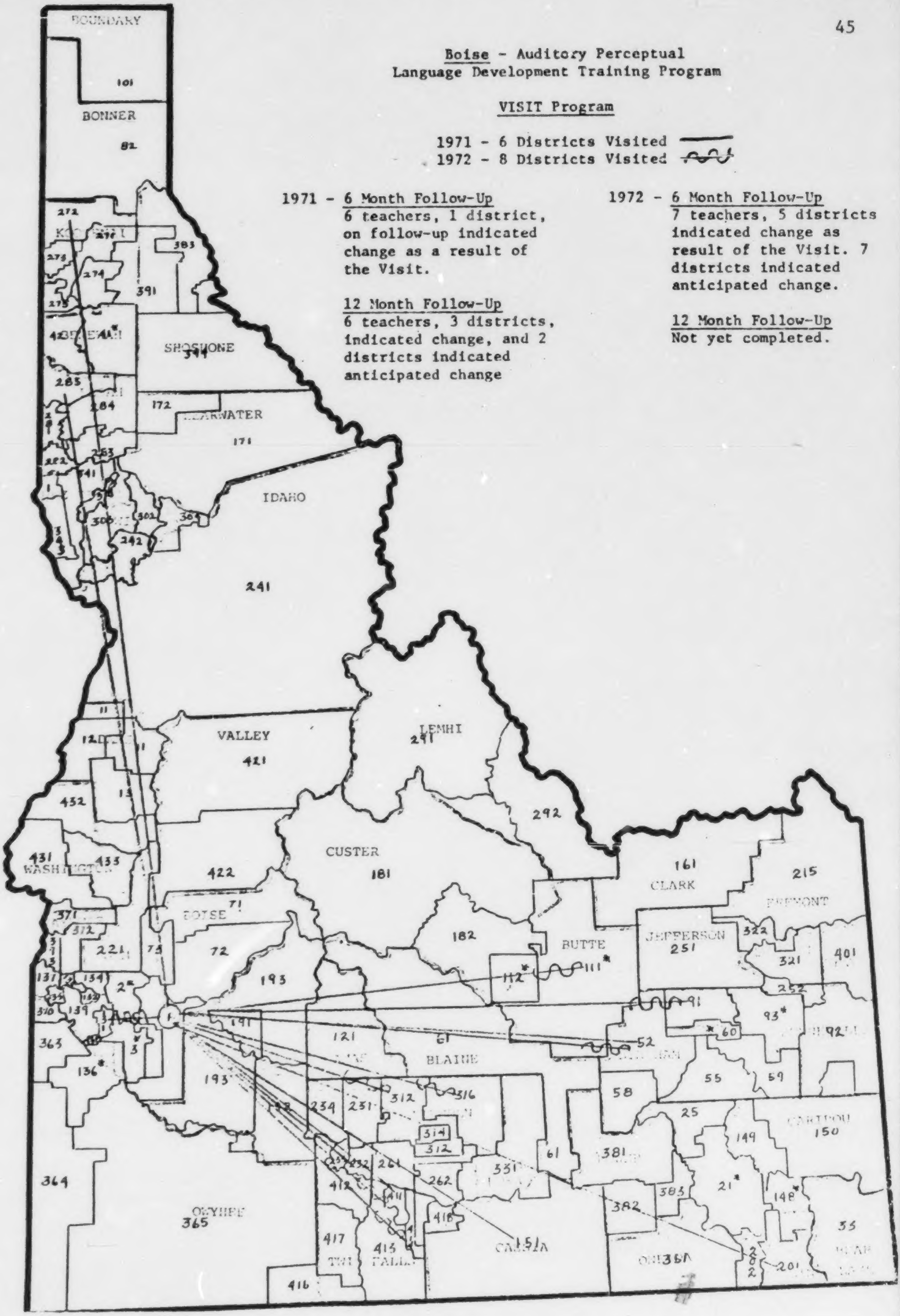
1971 - 6 Districts Visited —
1972 - 8 Districts Visited 〰

1971 - 6 Month Follow-Up
6 teachers, 1 district, on follow-up indicated change as a result of the Visit.

12 Month Follow-Up
6 teachers, 3 districts, indicated change, and 2 districts indicated anticipated change

1972 - 6 Month Follow-Up
7 teachers, 5 districts indicated change as result of the Visit. 7 districts indicated anticipated change.

12 Month Follow-Up
Not yet completed.


BOUNDARY
101
BONNER
82
SHOSHONE
CLEARWATER
171
172
IDAHO
241
242
VALLEY
421
LEMHI
291
292
CUSTER
181
182
WASHINGTON
431
432
433
BOISE
71
72
422
221
193
CLARK
161
FREMONT
215
JEFFERSON
251
BUTTE
111
112
BLAINE
61
121
58
25
CARIBOU
150
149
381
382
383
21
148
33
OWYHEE
365
364
363
136
417
415
416
412
261
262
231
234
312
314
316
331
151
52
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59
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91
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93
321
322
401
201

J. Articles in periodicals

1. Everyone's Children, a Special Education Newsletter circulated by the State Department of Education.
2. Boise Schools Newsletter, a monthly publication which is distributed to all personnel in the district.
3. Idaho Speech and Hearing Newsletter.
4. The Title III Quarterly, January 1972, "Title III in Special Education," Published by the President's National Advisory Council on Supplementary Centers and Services.

Numerous unsolicited requests for further information regarding the project were received from all sections of the United States as a result of the article which appeared in the Title III Quarterly, and as a result of recommendations from some of the nationally recognized consultants who conducted workshops for the project.

K. Brochure

A brochure on the development of the Title III project was prepared and distributed widely to groups whenever presentations were made regarding the project; to visitors to the project; to persons requesting information about the project; and to all interested persons upon request.

L. Films

The film, "Early Recognition of Learning Disabilities," was purchased with Title III funds, and it has been loaned upon request to persons in Boise Public Schools, parochial schools in Boise, colleges in the Boise area, and to PTA groups throughout the State. Films directly related to the content of the in-service training have been shown at workshops, and loaned to other interested groups. The films are listed on Page 39 of this report.

M. Slides

Slides have been made of:

1. The testing and training procedures in the Title III Auditory Perceptual and Language Development Training Program.
2. The screening and training procedures of the developmental first grade class at McKinley School, which was an outgrowth of the Title III project.
3. The workshops conducted by the nationally recognized consultants.
4. The in-service training workshops conducted by the project staff.

The slides were shown to many of the groups that requested presentations, and to some of the visitors to the project.

N. Video-tapes

Video-recording equipment was purchased upon recommendation of the Evaluation Team, and it was used to video-record:

1. The testing procedures for screening the first grade entrants to McKinley School for selection of the children to be placed in the developmental first grade class.

2. The sequential training procedures with one class conducted by the project coordinator at the Jefferson School unit. Various phases of the training program, beginning with the initiation of the training and continuing to the termination of the project, were video-recorded. Some of the video-tapes were shown to the speech and hearing therapists, and will be shown in in-service workshops and in conferences with project teachers and interested non-project teachers in the project schools when deemed feasible.
3. The training procedures in the project classes conducted by the project clinicians. These video-tapes were shown to the project teachers in the project schools where they were recorded.

O. Data

The test-retest data in the Title III project was collected and compiled by the project staff, and sent to Dr. Lee Hendrix, Assistant Professor, Department of Statistics at Brigham Young University, whose services were contracted to process and analyze the data in order to provide quantitative and qualitative information on the effectiveness of the program at the conclusion of the project.

The statistical report and analysis of the data submitted by Dr. Hendrix is included in this report under Part B Statistical Data, Pages 83-86, for dissemination within the Boise vicinity and through the Title III Office for

Dissemination, State Department of Education, beyond the Boise area.

Data collected from the screening procedures used to identify the first grade entrants with learning problems at McKinley School was compiled and disseminated through slide presentations to administrators, supervisors, personnel at McKinley School, participants in the in-service workshops, and visitors to the project. Fifteen of the first grade entrants that exhibited the most severe handicaps were selected from the test results of the screening for a developmental first grade class. The teacher was a regular first grade teacher, who had had the advantage of the in-service training in the project. The methods, materials, and strategies employed in the Auditory Perceptual and Language Development Training Program were adapted for use in the developmental first grade.

At the conclusion of the school year all first grade children were retested with the same instruments used for the screening to determine the comparative progress of those children in the developmental first grade with those in the other three first grades. The analysis of the test-retest results and the statistical data is included in this report under Statistical Data Pages 87-93, since the acceptance and implementation of the training program at McKinley School was a direct outgrowth of the Title III project.

3. INTERNAL EVALUATION

The internal evaluation was continuous throughout the operation of the project. The project director, the project coordinator, and the project clinicians made continuous evaluations.

The project director and the project coordinator visited the project classes periodically, and noted steady improvement in the clinicians' approach to the training program, as well as the progress made by the children in the classes.

Staff conferences were held each Friday afternoon for evaluation and planning. The project clinicians kept a weekly evaluation worksheet, which was set up with weekly goals for each child in each area of the developmental training program, and the worksheets were submitted by each clinician for progress evaluations at the weekly conferences. The clinicians also made subjective reports on the effectiveness of the training program.

Spot tests were administered to one girl and one boy in each grade in the experimental group at each of the project schools the first week in March, and they indicated significant gains in the deficit areas. See Table II, Page 51.

Post-tests were administered in May to all of the children participating in the program to determine the exact extent of the progress made by each child, as well as to gather statistical data.

There was continuous subjective feedback from the classroom teachers to the project staff to the effect that they had observed noticeable

TABLE II

SPOT TESTS

March 3, 1972

	1st Grade Boy	Pre	Post	1st Grade Girl	Pre	Post	2nd Grade Boy	Pre	Post	2nd Grade Girl	Pre	Post
Hillcrest	Aud. Discrim.	-12	-10	Aud. Discrim.	-9	-0	Aud. Discrim.	-8	-5	Aud. Discrim.	-9	-2
	Aud. Assoc.	20	17	Sound Blending	25	43	Aud. Reception	22	27	Aud. Reception	28	32
	Gramm. Closure	29	31				Gram Closure	17	16	Aud. Memory	26	36
	Aud. Memory	27	32				Aud. Memory	23	24			
							Aud. Closure	18	35			
							Sound Blending	26	36			
Jefferson	Aud. Discrim.	-8	-7	Aud. Discrim.	-7	-4	Aud. Discrim.	-7	-4	Aud. Discrim.	-6	-4
	Aud. Assoc.	26	31	Verb. Express.	32	41	Aud. Memory	31	25	Aud. Assoc.	21	25
	Aud. Memory	28	30				Aud. Closure	30	40	Gramm. Closure	20	26
	Aud. Closure	29	32									
	Sound Blending	28	44									
Koelsch	Aud. Discrim.	-7	-5	Aud. Discrim.	-9	-1	Aud. Discrim.	-8	-3	Aud. Discrim.	-6	-2
	Aud. Assoc.	26	29	Gramm. Closure	26	27	Aud. Closure	30	44	Aud. Reception	19	36
				Aud. Closure	26	25				Gramm. Closure	25	28
McKinley	Aud. Discrim.	-7	-1	Aud. Discrim.	-7	-5	Aud. Discrim.	-8	-3	Aud. Discrim.	-10	-4
	Verb. Express.	26	32	Aud. Memory	28	26	Gramm. Closure	32	35	Aud. Reception	30	32
				Aud. Closure	21	36				Aud. Assoc.	26	35

Spot tests were given after thirteen weeks of training.
Scores for auditory discrimination are error scores from Wepman Auditory Discrimination Test.
Other scores are the scaled scores from the auditory sub-tests of ITPA.

improvement in attitudes and behavior in most of the students participating in the program. Objective evidence of teacher attitudes and behavior were obtained from the prepared questionnaires on student competencies and behavior in the classroom, which were completed and returned to the project clinicians prior to the implementation of the training program and again at the termination of the program in May. The results of the teacher ratings were made a part of the research and are included in the statistical data in this report.

Subjective declarations by parents to individual project clinicians indicated a better understanding of their children's learning problems with a corresponding change in attitude toward their children's inability to meet classroom objectives at accepted levels.

Parent attitudes were formally assessed by a prepared questionnaire, which was completed at the final conference with the project clinicians, and it indicated that the parents were generally very impressed with the program and their children's academic progress in the classroom. The one comment that was unanimous was in regard to the improvement in the children's self-concept and attitude toward school. The questionnaire is included in Appendix A Page 126.

A questionnaire was prepared and presented to all participants in the in-service training program at the final workshop in May to obtain an assessment of teacher growth in understanding the nature of a learning disability, and identifying, testing, and training children with learning problems. The questionnaire is in Appendix A, Pages 127-128.

A written evaluation of the project and the in-service workshops was also elicited from each participant.

The responses from the participants were largely positive. The chief criticism was that more time was needed to continue the interaction in groups on grade levels with more demonstrations of training techniques.

4. INSTRUMENTS USED IN PROJECT

The instruments that have been developed and/or used in the project are:

1. Check List for Identification of a Child With a Learning Disability
2. Audiogram
3. Speech Inventory Form
4. Wepman Auditory Discrimination Test
5. Illinois Test of Psycholinguistic Abilities (ITPA)
6. Wide Range Achievement Test (WRAT)
7. Goldman-Fristoe-Woodcock (GFW) Test of Auditory Discrimination

   This test was used as a supplementary test for discriminating sound in noise when deemed advisable by the project clinicians.
8. Teacher Evaluation Questionnaire
9. Supplementary Tests

   These tests were administered only to the experimental group to give project clinicians more information about the whole child.
10. Developmental History Form

11. Parent Evaluation Questionnaire
12. Weekly Evaluation Worksheet
13. Pre-post Graph for ITPA
14. Teacher Evaluation of In-Service Training

A sample copy of each of these instruments is submitted and included in this report in Appendix A, Pages 116-133.

B. EFFECTIVENESS OF PROJECT

1. OUTCOMES OF PROJECT

The effectiveness of the project has been determined by the unsolicited responses of the personnel in the Boise Schools directly and indirectly involved in the project; the people in the area and the State, who attended the workshops conducted by nationally recognized consultants; and the post-visit reports from the many educators throughout the State who visited the project.

The consensus of these responses and reports was that the greatest outcomes of the program were:

a. Employing speech and hearing clinicians for the diagnosis and remediation of auditory learning problems, which assures adequate preparation and expertise for the auditory training and the speech and language development emphasized in the program.

b. Conducting classes at the project schools four days a week, which allowed the children to remain in the regular classrooms and receive specific specialized training in the integration of all perceptual processing with emphasis on the basic auditory skills necessary for successful learning.

c. Providing workshops conducted by nationally recognized specialists to create an awareness of auditory learning problems among the people in the Boise Public Schools, in the parochial schools, in the community, and in the colleges and universities in the Boise area and in the State.

d. Conducting in-service training workshops for project teachers, speech and hearing therapists, and project clinicians to create an awareness of auditory learning problems; to provide specific measures for identification and diagnosis of children with learning disabilities; and to present a structured and sequential program with a primarily auditory approach for training children with learning disabilities.

The project teachers were given released time for one-half day each month to attend the workshops, and their substitutes were paid out of Title III funds. All of the participants in the workshops from the Boise Schools were given two hours of in-service credit.

The in-service training for teachers proved to be one of the greatest strengths of the program. The teachers enrolled in the in-service program were selected by the principals in their respective project schools. At the beginning of the project many of the teachers indicated that they did not want to participate in the program, if they were to have all of the children identified as having auditory learning problems in their classrooms. They were assured that the children would remain scattered throughout the classrooms as they had been previously. Following the workshop in March, the first, second, and third grade teachers from the McKinley School requested permission to teach a group of children who had been identified as having learning disabilities.

This was a great step forward toward moving the structured and sequential training program for learning disabled children into the classroom with regular classroom teachers conducting the classes.

The proposal for the program to be implemented at the McKinley School was made to the Principal of McKinley School, the Director of Pupil Personnel, and the Superintendent of the Boise Public Schools. All agreed that it would be an excellent experiment to determine whether the methods and materials employed in the Title III Auditory Perceptual and Language Development Training Program could be used successfully in a regular classroom situation to prevent failure.

Approval was given for the inauguration of self-contained classes for those high risk children who were identified as having primarily auditory perceptual and language deficits. The classes were considered, but not labeled, a developmental first grade, a transitional second grade, and a transitional third grade.

The screening procedures for the first grade entrants were planned by the project personnel and initiated the first week of the 1971-72 school year. Members of all special services under Pupil Personnel participated in the screening, and assisted in the selection of the fifteen high risk children to be placed in the developmental first grade.

The children were selected for the transitional second and transitional third grades by teacher observation and completion of the Check List for Identification of a Child with a Learning Disability which is included in this report in Appendix A Page 116.

The subjective comments of the first grade teacher as to the effectiveness of the program indicated that more than half of the children were performing at average or above first grade level and would move into a regular second grade class next year. The other half of the children were recommended for the transitional second grade, because the teacher felt that, even though the test scores indicated that they were ready for a regular second grade, another year in a structured program with a project teacher would be more beneficial for them. The teacher of the developmental first grade offered the following evaluation:

Evaluation - Learning Disabilities

This has been a most rewarding and gratifying year. The children have made such a tremendous growth, and have done it happily and with a complete lack of pressure and frustration.

Parents, too, are pleased with the academic progress, as well as the improvement at home in discipline, responsibility, and manners. They feel their children's whole self-concept has changed for the better.

Daisy Jenson
McKinley
Developmental First Grade Teacher

The statement submitted by the other first grade teachers at McKinley was:

Evaluation - Learning Disabilities

We can attribute the unusual success of our 3 first grade classes to having a developmental first grade class. We have progressed so much faster and further this school year, and have been able to spend more time on individuals when necessary.

Roberta McKaig
Sharon McGlinchey
Barbara Hatfield

McKinley Elementary
First Grade Teachers

The classroom teachers who conducted the transitional second and third grade classes were those who had had the advantage of the in-service training, and the project personnel provided support and supervision. The project clinician continued to provide intensive training for those children in the transitional classes who had been identified as having severe auditory and language disturbances.

Unfortunately, no differential diagnosis was made on these children, due to the lack of personnel, so there are no objective results available to determine the progress made by the children in the transitional classes. However, the subjective reports of the teachers of the transitional second grade and transitional third grade indicate that the children in those classes made significant progress, and the teachers profited greatly by the experience. The testimonials submitted by those teachers follow:

Evaluation - Learning Disabilites

I feel that this program has been very worthwhile. Most of the children have progressed nicely. They were extremely low when they started. They were all reading below grade level: about half of the group was at preprimer and primer levels. Two children had to go back to readiness level. Most of the children in the class are reading at 2 level presently.

The children were extremely frustrated at the first of the year. Most are happier now and much more contented, and perform well with less tension.

The parents seem to be very pleased with the progress of their children. They liked and accepted the program.

I am pleased with the group as a whole, but there are two children whom I had difficulty reaching and being able to motivate.

The two children who worked with Mrs. Worthington have made remarkable progress. I'm real proud of them.

Thirteen of the children are going into transitional third grade, two of whom may be moved into a regular third grade after a few weeks. Two children are going into regular third grade.

I have been extremely frustrated this year. I think it will be easier next year. I have a little more insight into the program now. I didn't realize that there are so many learning problems, which go undiscovered or ignored in a regular classroom.

I especially like the phonics and language program prepared for us.

Mary Arte
McKinley
Transitional Second Grade

Evaluation of L.D. Program
in Third Grade Transitional Room

McKinley School

I taught 16 students, many with marked learning disabilities. All of them made remarkable progress and are being promoted to fourth grade, except one immature child who had been recommended for second grade retention last year, but the parents wished to have her try this transitional situation.

The parents have been exceptionally well pleased with our program and are amazed at their children's attitude and progress. They often remark that they can see a great deal of improvement at home, too, in organization, responsibility, self-confidence, and follow-through.

I feel the program has been a tremendous success. The smaller class and special learning techniques have made it possible to individualize, build skills and egos. The children are extremely happy and feel self-assured. They have been stimulated to new heights in basic skills and have overcome most of their difficulties. If they haven't mastered their weaknesses, they understand them now, and are able to concentrate and work independently.

I have never worked with a group who started so low, most in primer and three at pre-primer levels, and have now progressed to third grade competence. It is difficult for me to properly describe this reward for the "hardest" year of my teaching career. The positive atmosphere of this type room does wonders. I can surely see its merits and appreciate what it makes possible to accomplish.

Fern Anderson
McKinley
Transitional Third Grade

The Principal of McKinley School was so interested and enthusiastic about the program that he submitted a proposal to the State Department of Education for a Title III ESEA grant to expand the program in McKinley School. The proposal was an outgrowth of the Auditory Perceptual and Language Development Program and was entitled, "A Primary

Developmental Program." The grant was rejected, but the principal and the teachers in the primary grades at McKinley School plan to continue to expand the program as far as possible within the limits of their budget.

The plans and the instruments used for the screening of the first grade entrants at McKinley School, the program that was planned for the parents during the time their children were being tested, and the tabulation of the test results are included in this report in Appendix C, Pages 158-163.

All of the first grade children were retested with the same instruments at the conclusion of the school year. The project staff compiled the pre-post data, and submitted it to Dr. Lee Hendrix, the research specialist, for analysis. The summary obtained from the analyses is included and submitted as part of this report under Statistical Data Pages 87-93.

As a result of the success of the program at McKinley School, several other principals in the Boise Schools have requested permission to implement developmental first grades in their schools. The outcome of these requests is discussed under Adoption of Project in this report.

e. Establishing a lending library in the project office for the use of the in-service training workshop participants to expand their knowledge in the field of learning disabilities, and preparing and distributing a bibliography of all the books, pamphlets, periodicals, and reprints that make up the library for the benefit of the workshop participants. The library has proved to be very beneficial to all persons in the area who are interested in learning disabilities, as well as those concerned with the project.

f. Collecting manuals and materials that have been found to be most effective in the program, and retaining copies of them in the project offices for review by teachers, parents, visitors to the project, and other persons interested in child development. Those that have proved most beneficial are:

    1. Montessori Methods and Materials
    2. Peabody Language Development Kits and Manuals
    3. Developmental Learning Materials and Manuals
    4. Teaching Resources Materials and Manuals
    5. Frostig - Materials and Manuals
    6. Karnes - Materials Kits and Manuals
    7. Trimble - Handbook for Perceptual Development
    8. Kaplan - Auditory Stimulator - Workbooks and Manuals
    9. Herr - Auditory Awareness - Workbooks and Manual
    10. Semel - Sound Order Sense - Workbooks and Manuals
    11. Brady, Konicki, Leedy - Daily Sensorimotor Training
    12. Gillingham and Stillman - Remedial Training - Manual and Materials
    13. Phonovisual Method - Manuals and Materials
    14. Schoolfield - Better Speech and Better Reading
    15. Open Court Method - Manuals and Materials

2. RESEARCH DESIGN

In order to determine the effectiveness of the program the Evaluation Team recommended that the services of a research specialist be constracted to construct a research design, direct the activities for collecting and compiling data, and analyze the statistical data obtained from the test-retest scores. The recommendation was followed, and the services of Dr. Lee Hendrix, Assistant Professor, Department of Statistics, Brigham Young University, Provo, Utah, were contracted for this purpose. Dr. Hendrix visited the project on September 16, 1971, and assisted the project personnel in developing the following research design for all project schools:

I. Screening and Identification - All Grades I and Grades II
    A. Wepman Auditory Discrimination Test - Form I
        1. Pre-test marked in blue - upper left corner
        2. Post-test marked in red - lower right corner
    B. Kuhlmann-Anderson - Group Psychological Test

II. Selection of Children for Project
    A. Children who failed Wepman on basis of age norms
        1. 48 children at each project school
            a. 16 children for experimental group
            b. 16 children for control group
            c. 16 children for alternates for the experimental and the control groups
                First grade - 2 boys and 2 girls
                Second grade - 2 boys and 2 girls

2. Matching - age norms (as far as possible)
    a. Experimental and control groups
3. Ratio of boys and girls
4. Range of difficulty - within validity of age norms
5. Children randomly selected from all classrooms

III. Diagnosis
  A. Illinois Test of Psycholinguistic Abilities (ITPA)
    1. All children participating in program
      a. Use standard mean score - record scaled scores
  B. Wide Range Achievement Test (WRAT)
    1. All children participating in program
      a. Begin at pre-school level and proceed to ceiling
        1. Spelling - First Grade and Second Grade
        2. Reading - First Grade and Second Grade

IV. Teacher Evaluation Questionnaire
  A. Completed for all children participating in the program
    1. Teachers not to be told which children were controls

V. Data for Research
  A. Pre-post - Wepman Auditory Discrimination Test
  B. Pre-post - Illinois Test of Psycholinguistic Abilities
  C. Pre-post - Wide Range Achievement Test
  D. Pre-post - Teacher Evaluation Questionnaire

NOTE: All clinicians should record test scores as directed in the manuals, so that they will be consistent.

AUDITORY DISCRIMINATION TEST

FORM I

			X	Y
1.	tub	- tug		▨
2.	lack	- lack	▨	
3.	web	- wed		▨
4.	leg	- led		▨
5.	chap	- chap	▨	
6.	gum	- dumb		▨
7.	bale	- gale		▨
8.	sought	- fought		▨
9.	vow	- thou		▨
10.	shake	- shape		▨
11.	zest	- zest	▨	
12.	wretch	- wretch	▨	
13.	thread	- shred		▨
14.	jam	- jam	▨	
15.	bass	- bath		▨
16.	tin	- pin		▨
17.	pat	- pack		▨
18.	dim	- din		▨
19.	coast	- toast		▨
20.	thimble	- symbol		▨
21.	cat	- cap		▨
22.	din	- bin		▨
23.	lath	- lash		▨
24.	bum	- bomb		▨
25.	clōthe	- clōve		▨
26.	moon	- noon		▨
27.	shack	- sack		▨
28.	sheaf	- sheath		▨
29.	king	- king	▨	
30.	badge	- badge	▨	
31.	pork	- cork		▨
32.	fie	- thigh		▨
33.	shoal	- shawl		▨
34.	tall	- tall	▨	
35.	par	- par	▨	
36.	pat	- pet		▨
37.	muff	- muss		▨
38.	pose	- pose	▨	
39.	lease	- leash		▨
40.	pen	- pin		▨

	X	Y
Error Score	/30	/10

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BOISE PUBLIC SCHOOLS

NAME____________________________

TEACHER____________________________

SCHOOL____________________________

GRADE_______ DATE________________

CA____________________________

IQ____________________________

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
TITLE III 89-10 70-13
ITPA

1971 - 1972

	PLA	SS	Deviation from Median SS	Sound Discrimination
Auditory Vocal Tests				
Auditory Reception				
Auditory Association				
Verbal Expression				
Grammatic Closure				
Auditory Sequential Memory				
Auditory Closure (supplementary)				
Sound Blending (supplementary)				
Visual Motor Tests				
Visual Reception				
Visual Association				
Manual Expression				
Visual Closure				
Visual Sequential Memory				

Adapted from ITPA Manual, p. 96.

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1526 Gilpin Avenue
Wilmington, Delaware

WIDE RANGE ACHIEVEMENT TEST

Reading, Spelling, Arithmetic from Pre-School to College

By J. F. Jastak, S. W. Bijou, S. R. Jastak

Printed in U.S.A.
1937, 1946, 1963
Revised Edition
1965

Name...Birthdate.................................M. F. Chron. Age..........................

School...Grade..........Reading Score..........Grade..........Stand-Sc..........%ile..........

Referred by..Spelling Score..........Grade..........Stand-Sc..........%ile..........

Date..................................Examiner..........................Arithmetic Score..........Grade..........Stand-Sc..........%ile..........

Percentiles and Standard Scores corresponding to grade ratings and age may be found in the Manual.

Level I—Spelling—Grade Norms.

Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade
1	N.5	12	Kg.4	23	1.5	34	3.0	45	5.7	56	10.3
2	N.8	13	Kg.5	24	1.6	35	3.2	46	6.0	57	10.9
3	Pk.1	14	Kg.6	25	1.7	36	3.5	47	6.3	58	11.5
4	Pk.2	15	Kg.7	26	1.8	37	3.7	48	6.5	59	12.2
5	Pk.3	16	Kg.8	27	2.0	38	3.9	49	6.8	60	13.0
6	Pk.5	17	Kg.9	28	2.2	39	4.2	50	7.2	61	13.8
7	Pk.7	18	Gr.1.0	29	2.3	40	4.5	51	7.7	62	14.5
8	Pk.9	19	1.1	30	2.5	41	4.7	52	8.2	63	15.2
9	Kg.1	20	1.2	31	2.6	42	5.0	53	8.7	64	15.9
10	Kg.2	21	1.3	32	2.7	43	5.3	54	9.2	65	16.7
11	Kg.3	22	1.4	33	2.9	44	5.5	55	9.7		

Level II—Spelling—Grade Norms.

Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade
0	Kg.2	11	4.0	21	6.7	31	9.0	41	12.4
1	Kg.6	12	4.3	22	6.8	32	9.3	42	12.8
2	Gr.1.0	13	4.6	23	7.0	33	9.6	43	13.2
3	1.3	14	4.9	24	7.2	34	9.9	44	13.6
4	1.6	15	5.2	25	7.4	35	10.2	45	14.0
5	1.9	16	5.5	26	7.6	36	10.5	46	14.4
6	2.2	17	5.8	27	7.8	37	10.8	47	15.0
7	2.6	18	6.1	28	8.1	38	11.2	48	15.7
8	3.0	19	6.3	29	8.4	39	11.6	49	16.4
9	3.3	20	6.5	30	8.7	40	12.0	50	17.2
10	3.7							51	18.0

Spelling Scores

Level I Test	Level I Cumul Score	Level II Test	Level II Cumul Score
Copying		**Copying**	
1 point	1	4-9	1
per	to	10-17	2
mark	18	18	3
Name		**Name**	
1 letter	19	1 letter	4
2 letters	20	2 letters	5
Spelling		**Spelling**	
1 point	21	1 point	6
per	to	per	to
word	65	word	51

—	|	/	\	○	×	┘	V	┐	+	Λ	┌	△	⊐	⊔	▽	⊏	⊓

Name ______________________________

1. ______________________
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39. ______________________
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41. ______________________
42. ______________________
43. ______________________
44. ______________________
45. ______________________
46. ______________________

Percentiles and Standard Scores corresponding to grade rating and age may be found in the Manual.

Level I—Reading—Grade Norms.

Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade
1	N.5	16-17	Kg.6	36-37	1.9	53	3.3	66	5.3	79	8.1	92	12.9
2	N.8	18	Kg.7	38	2.0	54	3.5	67	5.5	80	8.4	93	13.3
3	Pk.1	19-20	Kg.8	39-40	2.1	55	3.6	68	5.7	81	8.7	94	13.7
4	Pk.2	21	Kg.9	41	2.2	56	3.8	69	5.9	82	9.0	95	14.1
5	Pk.4	22	Gr.1.0	42-43	2.3	57	3.9	70	6.1	83	9.3	96	14.5
6	Pk.5	23	1.1	44	2.4	58	4.1	71	6.3	84	9.7	97	14.9
7	Pk.7	24-25	1.2	45-46	2.5	59	4.2	72	6.5	85	10.1	98	15.4
8	Pk.9	26-27	1.3	47	2.6	60	4.4	73	6.7	86	10.5	99	15.8
9	Kg.1	28-29	1.4	48	2.7	61	4.5	74	6.8	87	10.9	100	16.2
10-11	Kg.2	30-31	1.5	49	2.8	62	4.7	75	7.0	88	11.3		
12	Kg.3	32-33	1.6	50	2.9	63	4.8	76	7.2	89	11.7		
13-14	Kg.4	34	1.7	51	3.0	64	5.0	77	7.5	90	12.1		
15	Kg.5	35	1.8	52	3.1	65	5.1	78	7.8	91	12.5		

Level II—Reading—Grade Norms

Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade
0	Pk.5	16	1.3	29	4.4	42	6.8	55	9.3	68	13.0	81	16.8
1	Pk.8	17	1.5	30	4.6	43	6.9	56	9.6	69	13.2	82	17.1
2	Kg.1	18	1.7	31	4.8	44	7.1	57	9.9	70	13.5	83	17.4
3-4	Kg.2	19	1.8	32	5.0	45	7.3	58	10.2	71	13.8	84	17.7
5-6	Kg.3	20	2.0	33	5.2	46	7.5	59	10.5	72	14.1	85	18.0
7	Kg.4	21	2.2	34	5.4	47	7.7	60	10.8	73	14.4	86	18.3
8	Kg.5	22	2.4	35	5.6	48	7.9	61	11.3	74	14.7	87	18.6
9	Kg.6	23	2.6	36	5.8	49	8.1	62	11.6	75	15.0	88	19.0
10-11	Kg.7	24	2.8	37	6.0	50	8.3	63	11.9	76	15.3	89	19.5
12	Kg.8	25	3.2	38	6.2	51	8.5	64	12.2	77	15.6		
13	Kg.9	26	3.5	39	6.3	52	8.7	65	12.4	78	15.9		
14	Gr.1.0	27	3.9	40	6.5	53	8.9	66	12.6	79	16.2		
15	1.1	28	4.2	41	6.6	54	9.1	67	12.8	80	16.5		

LEVEL 2

Two letters in name (2) A B O S E R T H P I U Z Q (13) 15

---

milk city in tree animal himself between chin split form 25

grunt stretch theory contagious grieve toughen aboard triumph 33

contemporary escape eliminate tranquillity conspiracy image ethics 40

deny rancid humiliate bibliography unanimous predatory alcove 47

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A R Z H I Q S E B O 10

Two letters in name (2) A B O S E R T H P I U Z Q 25

AUDITORY PERCEPTUAL AND LANGUAGE
DEVELOPMENT TRAINING PROGRAM

Boise Public Schools

NAME ______________________

TEACHER ______________________

SCHOOL ______________________

GRADE ________ DATE ____________

TEACHER EVALUATION QUESTIONNAIRE - TITLE III 70-13

1971 - 1972

The Teacher Evaluation Questionnaire will be used for gathering data for research. Please complete the form for computer processing. Please rate the child whose name appears on this questionnaire on his performance in the classroom in the following areas: (Circle the most appropriate answer. Circle only one answer. Circle with black pen.)

CODE: Excellent (E) Very Good (VG) Good (G) Fair (F) Poor (P)

1.	Understanding the spoken word	E	VG	G	F	P
2.	Following oral directions	E	VG	G	F	P
3.	Retaining and retelling what was heard	E	VG	G	F	P
4.	Expressing thoughts and ideas	E	VG	G	F	P
5.	Filling in sounds in words or words in sentences	E	VG	G	F	P
6.	Blending sounds into words	E	VG	G	F	P
7.	Breaking words into sounds or syllables	E	VG	G	F	P
8.	Reading	E	VG	G	F	P
9.	Spelling	E	VG	G	F	P
10.	Writing	E	VG	G	F	P
11.	Attitude toward school	E	VG	G	F	P
12.	Behavior in the classroom	E	VG	G	F	P
13.	Self-confidence	E	VG	G	F	P
14.	Participation in classroom activities	E	VG	G	F	P

BE SURE THAT ONE ANSWER IS CIRCLED FOR EACH ITEM.

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
Title III 89-10 70-13
Boise Public Schools

School________________

Clinician_____________

RESEARCH CELLS

Pre-Test Date_______

Grade	Sex	Score	Age	Teacher	EXPERIMENT	Score	Age	Teacher	CONTROL
1	GIRLS								
1	BOYS								
2	GIRLS								
2	BOYS								

3. STATISTICAL DATA

At the conclusion of the project all test-retest data was collected and compiled by the project personnel and forwarded to Dr. Hendrix at Brigham Young University for computer processing and analysis.

Dr. Hendrix visited the project on August 4, 1972 and presented the results of the analyses. The gains made in the Title III project by the experimental group were consistently greater on every subtest than those made by the control group. The complete evaluation of the statistical data is submitted as part of this final report.

The analyses of the McKinley First Grade indicated that the developmental first grade maintained a continuous growth rate equal to the other three first grades in several areas and made significantly greater gains in five areas.

The summary of the gains made by the developmental first grade class as compared to those made by the other three first grade classes at McKinley School is also included and submitted as part of this final report as an outgrowth of the Title III Auditory Perceptual and Language Development Training Program.

Evaluation

The evaluation design was structured in the fall of 1971. Four independent variables were identified as subjects of research. Three of these variables (school, grade, and sex) were characteristics of the students. The fourth was the experimental variable of Treatment. The following cell structure (Table A) was identified according to the characterisics of the students as to school, grade, and sex. Students were then randomly assigned from each cell to the two treatment groups. Thus, both groups in the beginning were balanced with regard to the characteristics of these variables.

Table A

Cell Structure of the Experimental Design
Including the Cell Frequencies as Originally Assigned

Variables		Hillcrest	Jefferson	Koelsch	McKinley
rade 1	Male	8	8	8	8
	Female	8	8	8	8
rade 2	Male	8	8	8	8
	Female	8	8	8	8

After this design had been set up, project personnel decided that whether or not the teachers working with the students had had an inservice training program ought to be included as an independent variable. The configuration of the data at the time the posttests were given indicated that this variable could be included and evaluated. The final cell structure with the frequencies

which were subjected to analysis is reported in Table B.

Table B

Cell Structure of the Experimental Design
as Subjected to Analysis Including the
Cell Frequencies Used in the Study
(N=141)

Variables			Hillcrest		Jefferson		Koelsch		McKinley	
Grade	Sex	Group	In	No In	In	No In	In	No In	In	No In
1	M	E	3	1	3	1	1	3	5	1
1	M	C	1	3	2	2	2	2	2	4
1	F	E	0	3	1	3	1	3	2	3
1	F	C	1	3	0	4	1	3	2	4
2	M	E	1	3	1	3	1	3	2	4
2	M	C	1	3	1	3	1	3	1	5
2	F	E	1	3	3	1	0	4	3	3
2	F	C	1	3	1	3	0	4	0	5

Four Instruments were included as dependent variables in the study. These included the (a) Teacher Evaluation Questionnaire (14 items), (b) Wepman Sound Discrimination Test, (c) WRAT Reading and Spelling Tests, and (d) ITPA. The following statistical model was used to analyze the data.

$$y = u + S_i + G_j + X_k + T_l + P_m + SG_{ij} + SX_{ik} + ST_{il} + SP_{im} + GX_{jk} + GT_{jl} + GP_{jm} + XT_{kl} + XP_{km} + TP_{lm} + SGX_{ijk} + SGT_{ijl} + SGP_{ijm} + SXT_{ikl} + SXP_{ikm} + STP_{ilm} + GXT_{jkl} + GXP_{jkm} + GTP_{jlm} + XTP_{klm} + E$$

y = The dependent variables as previously described.

S = School i: 1 = Hillcrest, 2 = Jefferson, 3 = Koelsch, 4 = McKinley

G = Grade j: 1 = Grade 1, 2 = Grade 2

X = Sex k: 1 = Male, 2 = Female

T = Treatment l: 1 = Experimental, 2 = Control

P = Experience m: 1 = Inservice Training, 2 = No Inservice Training

E = Experimental Error including the four-way and five-way Interactions.

Analyses of Variance were performed on the pretests, posttests, and gains from pretest to posttest on each of the subtests of the four instruments. These analyses along with the means associated with them are reported in Tables 1-120 in the Appendix. The emphasis in the presentation of the results is directed to the analyses of the gains rather than on existing differences as measured at the time of the pretest or at the time of the posttest. It is this analysis of the gains that shows the differential growths made by the components of the experimental design.

Teacher Evaluation Questionnaire (TEQ)

The TEQ is comprised of 14 items, each rated on a scale of 1-5. The results of each will be reported separately. Summaries of the significant effects and interactions obtained from Tables 1-42 in the Appendix have been made and are reported in Tables C, D, and E, summarizing the results of the pretests, posttests, and gains, respectively. The means associated with these analyses are reported in Tables 43-56 in the Appendix.

Tab[illegible]

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Pretest on the Teacher Evaluation Questionnaire (TEQ)

Source	df	Items													
		1	2	3	4	5	6	7	8	9	10	11	12	13	1
School (S)	3				.025	.10			.10	.05	.025	.05			
C1	1				.05										
C2	1								.10		.01	.025			
C3	1				.10	.025			.10	.01	.01				
Grade (G)	1									.005	.005	.10	.10		
Sex (X)	1		.05			.01	.005	.025	.005	.005	.01		.005		
Treatment (T)	1			.10					.10	.025					
Experience (P)	1	.005	.005	.005	.05	.10	.05		.05	.025		.0005		.05	[illegible]
SG	3									.025	.025				
SX	3						.10								
ST	3											.05		.10	
SP	3								.05	.01	.01	.025			
GX	1														
GT	1														
GP	1										.10				
XT	1														
XP	1													.05	
TP	1	.10	.10			.10					.05				
SGX	3			.10										.10	
SGT	3														
SGP	3							.10			.025				
SXT	3														
SXP	3														
STP	3										.10	.001			
GXT	1										.10	.01	.05		
GXP	1														
GTP	1														
XTP	1														

Table D

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Posttest on the Teacher Evaluation Questionnaire (TEQ)

Source	df	Items 1	2	3	4	5	6	7	8	9	10	11	12	13	14
School (S)	3			.10	.005		.005	.025		.05					
C1	1				.01										
C2	1														
C3	1		.10	.10	.05	.10	.005	.005		.025	.025				
Grade (G)	1										.10				
Sex (X)	1	.10				.10	.025	.05	.025	.05	.01		.025		
Treatment (T)	1														
Experience (P)	1			.025					.10	.05		.025	.005	.05	.10
SG	3			.05	.01										.05
SX	3							.10							
ST	3														
SP	3				.05		.10								
GX	1														
GT	1														
GP	1								.10						
XT	1												.10		
XP	1														
TP	1														
SGX	3									.10					
SGT	3			.05											
SGP	3				.05										
SXT	3										.05				
SXP	3			.10											
STP	3														
GXT	1									.05					
GXP	1						.10	.05	.10						.10
GTP	1														
XTP	1														

Table E

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Gains on the Teacher Evaluation Questionnaire (TEQ)

Source	df	Items 1	2	3	4	5	6	7	8	9	10	11	12	13	14
School (S)	3														
C1 [illegible]	1											.10			
C2 [illegible]	1								.05						
C3 [illegible]	1						.05	.10							
Grade (G)	1														
Sex (X)	1														
Treatment (T)	1			.025	.025		.025	.025	.025	.0005			.01		
Experience (P)	1	.05	.005				.10						.05		
SG	3					.10	.01	.025		.10					.05
SX	3														
ST	3														
SP	3								.10						
GX	1							.10							
GT	1														
GP	1				.05										
XT	1														
XP	1														
TP	1														
SGX	3								.10	.025			.01		.01
SGT	3								.10	.025			.10		
SGP	3						.10	.10	.01	.10	.10		.025		
SXT	3														
SXP	3									.025					
STP	3							.10				.10			
GXT	1														
GXP	1							.05		.05					
GTP	1														
XTP	1														

Item 1: Understanding the spoken word.

On the pretest, teachers having no Inservice Training (NI) rated students higher than those having had the Inservice Training (I), reporting a mean of 2.895 compared to 2.222. Although the direction of this difference remained the same at the posttest (3.231 to 2.926), the difference was no longer significant. The superior gain of the Inservice group (.704 compared to .336) nearly offset the initial difference. The effect of the Inservice Training may have given the teachers a greater awareness of problems with regard to understanding the spoken word. They may have been more critical in their evaluations both at the time of pretest and posttest. However, this greater awareness or critical evaluation also enabled them to identify greater growth in their students. No significant differences in gains were made among the levels of the other independent variables.

Item 2: Following Oral directions.

Females were identified on the pretest as being superior to males (2.700 compared to 2.197) in following oral directions. However, males made somewhat greater gains (.594 compared to .470) and although nonsignificant, made the score on the posttest similar enough so that they were not significantly different. The results of the Experience Variable were similar to Item 1. NI scored 2.748 on the pretest compared to 2.047. On the posttest NI scored 3.006 compared to 2.916. The I group had gained .869 compared to .258 for NI. No other significant gains were indicated on Item 2.

Item 3: Retaining and retelling what he has heard.

Again the NI rated the students significantly higher on both pretest and posttest than the I group. The gains were more similar this time, and although the direction

of the gain was comparable to that in Items 1 and 2, the difference was nonsignificant. The only variable showing a significant difference in gain was the Treatment Variable. Experimental students were rated as having made greater gains than the control students (.729 compared to .396).

Item 4: Expressing his thoughts and ideas.

Some differences existed on the pretest and posttest among the schools, but the gains were about the same. Hillcrest and Koelsch scored highest on the pretest with means of 2.696 and 2.643, respectively. McKinley scored lowest with 1.959, Jefferson rated 2.190. The same essential pattern existed on the posttest with all making comparable gains. The treatment Variable was the only main effect showing a significant gain. Experimental students obtained gains in ratings of .615 compared to .341 for control students. The interaction between grade and experience also was significant on the analysis of gains. At the first grade level students rated by I made greater gains than those rated by NI (.771 compared to .297), whereas, at the second grade level the opposite was true with NI ratings being .507 compared to .366). No other effects or interactions were significant.

Item 5: Filling in sounds in words or words in sentences.

Some differences among the schools existed on the pretest and persisted to the posttest. McKinley scored somewhat lower (1.750) than the other schools with Koelsch scoring highest (2.512). Hillcrest and Jefferson scored 2.189 and 2.119, respectively. On the posttest McKinley and Koelsch again scored lowest and highest, respectively. Gains were nearly the same for the four schools. Females scored significantly higher than males on the pretest and posttest. On the pretest females scored 2.440 compared to 1.880 for males. On the posttest females scored 2.997 compared to 2.562 for males. No significant differences in gains were made among the levels of any of the independent variables or their interactions.

Item 6: Blending sounds into words.

Significant difference between males and females was indicated on the pretest with females scoring 2.388 compared to 1.740 for males. These differences also existed on the posttest due to similar gains. Although no differences were indicated among the schools on the pretest, differences existed in the amount of gains made. Koelsch made greatest gains (.935) and McKinley made the least (.536). Jefferson and Hillcrest gained .825 and .634 respectively. The experimental group again made greater gains than the control group gaining .919 compared to .532. Although a significant difference existed between I and NI on the pretest (1.764 and 2.266 respectively), the difference was largely made up by the greater gain of the I group gaining .914 compared to .572. A significant interaction existed between school and grade on the analysis of gains. Greater gains were made at the second grade at Hillcrest, Jefferson, and Koelsch but at the first grade level at McKinley. The large gain made by Koelsch second graders as compared to first graders also contributed to this significant interaction.

Item 7: Breaking words into sounds or syllables.

Females were rated higher than males on the pretest with a mean of 2.1682 compared to 1.719. This difference persisted to the posttest since both made comparable gains. Again differences in gains were obtained between the treatment groups. The experimental students gained .885 compared to .526 for controls. The school by grade interaction also was significant with regard to the gains. The

greater gains at the first grade level as compared to second at Jefferson contrasted to the greater gains at the second grade level as compared to first at Koelsch were largely responsible for this interaction. Gains were comparable for both grades at Hillcrest and McKinley.

Item 8: Reading.

Although no significant differences existed among the schools on the pretest, the gains made were not the same. The major difference in these gains was the large gain of 1.030 made at Jefferson in comparison to the other schools. Gains at Hillcrest, Koelsch, and McKinley were .556, .610, and .673, respectively. Significant differences existed between males (1.934) and females (2.527) on the pretest which continued to the posttest. Both groups made similar gains. Significant differences between the treatment groups were made in terms of the gains. The experimental group gained .852 compared to .581 for the control group. The school by experience interaction which existed on the pretest was not significant on the analysis of the gains.

Item 9: Spelling.

Significant differences were indicated among the levels of several of the main effects and interactions on the pretest and posttest. Initial differences existed among the four schools. Koelsch scored highest with a mean of 2.461, while McKinley scored lowest with a mean of 1.932. Hillcrest scored 2.328, and Jefferson scored 2.116. Differences also existed between the grades with second grade students scoring 2.441 and first grade students obtaining 1.978. Females scored significantly higher than males obtaining a mean of 2.499 compared to 1.957 for males. However, the significant school by grade interaction indicated that this trend was not consistent for every school. Second grade students scored higher than first grade students at Hillcrest, Jefferson and Koelsch, whereas, first grade students scored higher than second grade students at McKinley. The control students started out with a mean of 2.401 which was significantly higher than the 2.016 for the initial mean for the experimental group. Students directed by teachers having had no Inservice Training in auditory discrimination began higher than students having teachers who had participated in the training (2.437 compared to 1.930). Again, this difference was not true for all four schools as suggested by the significant school by Experience interaction. On the pretest students assigned to teachers having no Inservice Training scored higher than those assigned to teachers having had the training at Hillcrest, Jefferson and Koelsch. At McKinley the opposite was true.

The only outstanding result on the analysis of the gains was the comparison of the treatment groups. Again experimental students made greater gains (.897) in the ratings than the controls (.406).. Several of the three-way interactions were significant also.

Item 10: Writing.

Several preexisting differences existed on the pretest analysis. Hillcrest and Koelsch scored highest with means of 2.488 and 2.461, respectively. McKinley and Jefferson scored lowest with means of 2.296 and 2.203, respectively. The grades differed with second grade students getting higher ratings than first (2.658, 2.245). The school by grade interaction indicated that this trend of second grade students obtaining higher ratings than first was true only for Hillcrest, Jefferson and Koelsch. First grade students obtained the higher ratings at McKinley. Female students received initial ratings that were significantly higher than males, averaging 2.671 compared to 2.261.

Although no significant differences were indicated in the ratings given by experienced and inexperienced (with regard to Inservice Training) teachers, this was because of offsetting results at the four schools. The significant school by experience interaction indicated that only at Koelsch did the experienced teacher give higher ratings than the inexperienced. In the other three schools the inexperienced teacher gave the higher ratings. Although such differences existed among the levels of the factors on the pretest, the analysis of the gains indicated that similar gains were made by all groups. In no cases were the differences among the levels of the variables significant.

Item 11: Attitude toward school.

Pretest ratings with regard to attitude toward school differed among the four schools. Ratings were more positive at McKinley (3.521) and Hillcrest (3.344) than at Koelsch (3.098) and Jefferson (3.073). Differences also existed as to whether or not teachers had had Inservice Training. Untrained teachers gave higher ratings (3.559) than trained teachers (2.910). The school by Experience interaction revealed that this was true at all four schools, but that the differences were much greater at McKinley and Jefferson than at Hillcrest and Koelsch. As with the results of Item 10, no significant differences were indicated in the gain from pretest to posttest. Gains were uniformly very small, with some being negative.

Item 12: Behavior in the classroom.

Females scored higher on both pretest and posttest analyses than boys, but the changes as measured by the gains were comparable. Differences in gains were significant for the treatment groups. The experimental group gained .273 compared to a gain of -.036 for the controls. Controls rated higher on the pretest than on the posttest. The experience factor also was significant relative to the analysis of the gains. Those with NI gained .204 compared to .0219 for the I group. Two of the three-way interactions also were significant.

Item 13: Self-confidence.

Differences existed between the two experience groups on the pretest and posttest, but the gains were comparable. The interaction of sex and experience also was significant on the pretest with the males performing about the same for both experience groups, but the females scoring higher for the NI than the I group. No significant differences in gains were made by any of the levels of the independent variables.

Item 14: Participation in classroom activities.

The experience groups differed on the pretest scoring 2.662 and 3.073 for the I and NI groups, respectively. Both groups made similar gains. The school by grade interaction on the analysis of the gains was significant. Jefferson and McKinley showed greater gains at the second grade level contrasted with Hillcrest or Koelsch which made greater gains at the first grade level.

Summary.

The treatment variable was significant on 7 of the 14 items in terms of the gains made. In each case the experimental group gained more than the control. On the 7 items for which the differences in gains were nonsignificant, the experimental group also consistently scored higher than the control. Thus, the treatment variable was a significant effect in determining the amount of gains that would be made. Experience was an important factor on 3 of the 14 items. In two of the three cases the students being rated by the teachers

having Inservice Training rated lower than the students being rated by the teachers having had no such training, but in terms of gains, the greater gains were made by the students being rated by teachers who had had the training. This same pattern was true for the other eleven items. Only item 12 deviated from this pattern.

Wepman Sound Discrimination Test

A summary of the significant effects and interactions obtained from Tables 57-59 in the appendix has been made and is reported in Table F. The means associated with the analyses are reported in Table 105 in the appendix.

The data were recorded as error scores, so that the higher scores indicate more errors than lower scores. Negative gains reflect a decrease in errors between the pretest and posttest.

Differences existed among the schools on the pretest analysis. Hillcrest made the greatest number of errors with a mean of 10.084 while Jefferson made the fewest, averaging 8.448. The mean at Koelsch was 9.527 and at McKinley it was 8.702. Differences initially existed between grades one and two with more errors being committed by grade 1 (9.938, 8.448). Males made more errors than females with a pretest mean of 9.801 compared to 8.494 for females.

Several differences in the amount of gain made were indicated. Hillcrest, Koelsch and McKinley made the greatest improvement with Jefferson making the least (-5.486, -5.648, -5.273, and -3.530, respectively). Differences also existed between the treatment groups. Experimental students made greater improvement with a mean gain of -5.899 compared to -4.036 for the control students. The school x sex interaction indicated that males made greater

Table F

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Pretest, Posttest and Gains on the Wepman Sound Discrimination Test

Source	df	Pretest	Posttest	Gain
School (S)	3	.05	.10	.01
C1	1	.05		.10
C2	1		.01	.01
C3	1			
Grade (G)	1	.025		
Sex (X)	1	.025		
Treatment (T)	1		.0005	.0005
Experience (P)	1		.10	
SG	3			
SX	3			.05
ST	3		.01	.01
SP	3		.10	
GX	1			
GT	1			
GP	1			
XT	1			
XP	1			
TP	1			
SGX	3			.10
SGT	3		.05	.01
SGP	3			
SXT	3			
SXP	3			.05
STP	3			
GXT	1		.05	
GXP	1			
GTP	1			
XTP	1	.01		.025

gains than females at Hillcrest, Jefferson, and McKinley, with the opposite being true at Jefferson. The school by Treatment interaction indicated that while the mean for the experimental group was higher than for the control at all four schools, the difference was greatest at Jefferson and least at Hillcrest. The experimental group made comparable gains at all four schools, but the control group made very little gain at Jefferson and made a gain comparable to the experimental groups at Hillcrest.

Wide Range Achievement Test (WRAT)

The WRAT Reading and Spelling tests were administered as one of the instruments in the study to attempt to ascertain the immediate effects of auditory training on these skills. A summary of the significant effects and interactions obtained from Tables 60-65 in the Appendix has been made and is reported in Table G. The means associated with these analyses are reported in Tables 106-107 in the appendix.

WRAT Reading.

No differences existed among the four schools on the initial measurement. Grade two students scored significantly higher on the pretest than grade one students (38.265, 23.103). Students assigned to teachers having no Inservice Training scored higher (32.735) on the pretest than students assigned to teachers having the training (28.330). Substantial gains were made by all of the schools with no significant differences in the gains indicated among them. Although second grade students remained significantly higher than first grade students on the posttest analysis (48.926, 39.528), first grade students made significantly greater gains (16.425, 10.661). Experimental students again made significantly greater gains (15.676) than control students (11.410).

Table 6

Summary of the Significant Effects and Interactions Obtained from the Analyses of the WRAT Reading and Spelling Scores

Source	df	Reading Pretest	Reading Posttest	Reading Gain	Spelling Pretest	Spelling Posttest	Spelling Gain
School (S)	3						.10
C1	1					.05	.025
C2	1						
C3	1						
Grade (G)	1	.0005	.0005	.0005	.0005	.0005	
Sex (X)	1				.025		
Treatment (T)	1		.01	.001		.05	.01
Experience (P)	1	.01	.025		.10	.025	
SG	3						
SX	3						
ST	3						
SP	3	.10	.005		.05	.025	.10
GX	1						
GT	1				.10	.05	
GP	1						
XT	1						
XP	1						
TP	1			.10	.10	.10	
SGX	3		.10				
SGT	3						.10
SGP	3						
SXT	3				.05	.025	
SXP	3						
SPT	3						
GXT	1		.05	.10		.05	
GXP	1						
GTP	1					.10	
XTP	1						

WRAT Spelling.

As with the reading, no significant differences existed among the four schools on the pretest measurement. Similarly, grade two students scored significantly higher (24.564) on the pretest than grade one students (17.625). The difference between males and females on the pretest analysis was significant with females outscoring males (22.069, 20.246). The school by Experience interaction indicated that on the pretest little difference existed between students assigned to experienced as compared to inexperienced (Inservice Training) teachers at Hillcrest, Jefferson and Koelsch. However, at McKinley a wide discrepancy existed with students assigned to teachers having no Inservice Training scoring higher than those assigned to teachers having the training. Contrary to the results in reading, differences in gains made at the four schools were significant. Hillcrest (4.744) made a smaller gain than Jefferson (8.349), McKinley (7.579) and Koelsch (6.639). Gains in spelling were consistently lower than gains in reading. The experimental group gained significantly more (7.648) than the control group (5.988). No other differences in gains were significant.

As measured by the WRAT, the experimental group made greater gains both in reading and spelling than the control group. This was consistent with the results of the Wepman and the Teacher Evaluation Questionnaire.

Illinois Test of Psycholinguistic Ability (ITPA).

Twelve subtests of the ITPA together with the overall mean were administered as part of the evaluation instruments. The results of each will be reported. Summaries of the significant effects and interactions obtained from Tables 66-104 in the Appendix have been made and are reported in Tables H, I, and J, summarizing the results of the pretests, posttests, and gains, respectively. The means associated with these analyses are reported in Tables 108-120 in the Appendix.

ITPA - Auditory Reception (ITPAAR)

Significant pretest differences existed among the schools. Hillcrest, Koelsch and McKinely all scored similarly (36.892, 36.458, 36.848, respectively) while Jefferson scored lower at 32.774. The pretest school by grade interaction also also was significant. First grade students scored higher than second grade students at Hillcrest and Jefferson with the opposite being true at Koelsch and McKinley. The only significant difference indicated in the analysis of the gains was in connection with the treatment variable. The experimental group gained 2.704 compared to a loss of 1.037 for the controls. The significant difference was due not so much to a large gain by the experimental group but a small gain coupled with a small loss for the controls.

ITPA - Visual Reception (ITPAVR)

Only minor differences existed among the schools as measured by the pretest. Hillcrest (36.122) scored highest and Koelsch (34.812) scored lowest. McKinley and Jefferson scored 35.928 and 35.190, respectively. The analysis of the gains revealed almost no gain from pretest to posttest. A significant difference existed between the two grades. The second grade gained 2.348 compared to a loss of 0.488 for the first grade. Here again the significant difference was due to a combination of a gain on the one hand and a loss on the other rather than a large change by one of the grades. The difference between the Treatment groups also was significant with the experimental group gaining 2.460 compared to a loss of 0.599 for the controls. The same pattern thus existed for the treatment differences as for the grade differences.

Table H

Summary of the Significant Effects and Interactions Obtained
from the Analyses of the Pretest on the ITPA

Source	df	AR	VR	AA	VA	VE	ME	GC	VC	AM	VM	AC	SB	Mean
School (S)	3	.025		.005	.10	.025		.01			.05	.05	.10	.05
C1	1					.025						.05	.025	
C2	1	.05		.025	.025			.005						.10
C3	1		.05	.01							.01			.10
Grade (G)	1												.025	
Sex (X)	1				.025		.025						.05	.10
Treatment (T)	1													
Experience (P)	1			.10	.10						.025			.10
SG	3	.05										.01		
SX	3	.10			.025									
ST	3											.10		
SP	3	.10						.005				.005	.025	.10
GX	1													
GT	1						.05				.10			
GP	1						.01					.10		
XT	1										.10			
XP	1										.025			.10
TP	1						.005					.10	.10	
SGX	3	.10	.05	.05							.10			.10
SGT	3				.10	.10	.05					.025		
SGP	3	.10	.10	.10										
SXT	3													
SXP	3		.10	.10	.05	.05								.05
STP	3													
GXT	1							.10						
GXP	1		.10											
GTP	1										.025			
XTP	1				.025									

Table I

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Posttest on the ITPA

Source	df	AR	VR	AA	VA	VE	ME	GC	VC	AM	VM	AC	SB	Mean
hool (S)	3		.05	.005		.001		.01			.025			
C1	1		.10			.0005							.10	
C2	1		.10	.005	.10			.005				.10		.10
C3	1										.01			
ade (G)	1		.05						.005				.05	
x (X)	1		.10		.10		.005						.10	.10
eatment (T)	1	.05	.01	.10	.05	.0005	.025	.05				.01	.001	.0005
perience (P)	1				.05			.05						.025
	3											.01	.10	
	3													
	3					.025					.10			
	3							.001				.10	.05	
	1													
	1								.01			.10		
	1					.05	.10							
	1		.025											
	1													
	1		.05					.10				.05	.05	
X	3										.10			
T	3					.10	.10							
P	3		.10											
T	3													
P	3		.10			.10								
P	3		.10	.10		.10								
T	1													
P	1													
P	1											.10		
P	1								.10					

Table J

Summary of the Significant Effects and Interactions Obtained from the Analyses of the Gains on the ITPA

Source	df	AR	VR	AA	VA	VE	ME	GC	VC	AM	VM	AC	SB	Mean
School (S)	3													
C1	1		.10											
C2	1		.10											
C3	1													
Grade (G)	1		.01						.05				.0005	
Sex (X)	1								.025					
Treatment (T)	1	.025	.05	.10	.025	.0005	.0005	.0005				.005	.005	.00
Experience (P)	1													
SG	3													.10
SX	3								.10					
ST	3			.025										
SP	3													
GX	1							.05						.10
GT	1													
GP	1							.025						
XT	1										.05			
XP	1													
TP	1							.10						.10
SGX	3		.05											
SGT	3							.10						
SGP	3													
SXT	3											.10		
SXP	3								.01					
STP	3													
GXT	1					.05								
GXP	1								.10					
GTP	1											.025		
XTP	1													

ITPA - Auditory Association (ITPAAA)

Differences existed among the four schools on the pretest analysis. Jefferson scored lower than the other three schools scoring 29.918 compared to 32.729, 33.479 and 35.490 for Hillcrest, Koelsch and McKinley, respectively. On the analysis of gains only the school by Treatment interaction was significant. At Jefferson and Koelsch the experimental groups gained more than the controls whereas, at Hillcrest both groups scored similarly, and at McKinley, the control group made greater gains than the experimental group.

ITPA - Visual Association (ITPAVA)

The analysis of the school variable revealed significant differences on the pretest analysis. Jefferson (32.215) scored lower than the other three schools. Hillcrest, Koelsch and McKinley scored 34.752, 36.706, and 35.309, respectively. Males scored significantly higher than females scoring 35.768 compared to 33.478. However, the difference between males and females was not the same at each school as indicated by the significant school by sex interaction. Males scored higher at Jefferson and especially Koelsch while very little difference existed between them at the other two schools. The magnitude of the gains again was small with the Treatment variable the only one yielding significance. Experimental students gained 3.224 compared to only 0.272 for the controls.

ITPA - Verbal Expression (ITPAVE)

Pretest differences among the schools were indicated on this subtest. Hillcrest (38.472) scored significantly higher than the other schools with Jefferson, Koelsch and McKinley scoring 34.113, 35.927, and 34.666, respectively. The only significant difference shown in the analysis of the gains related to

the Treatment variable. Experimental students gained 6.894 compared to 1.885 for controls. Gains on this subtest were somewhat larger overall than for the preceding subtests.

ITPA - Manual Expression (ITPAME)

On the pretest analysis differences between males and females was significant. Males, with a mean of 38.831 scored higher than females with a mean of 36.130. The grade by Treatment interaction was significant with the initial difference between the experimental and control students being greater at the second grade level than at the first. The grade by experience variable also was significant on the pretest analysis. Students assigned to teachers having no Inservice Training scored higher at the first grade level while students assigned to teachers having participated in Inservice Training scored higher at the second grade level. The significant pretest interaction of treatment and experience revealed that initially among the experimental students scores were higher under nonexperienced teachers while among the control students the opposite was true. The only significant difference in the gain scores was between the experimental and control students. Experimental students gained 4.563 compared to a loss of 0.006 for the controls.

ITPA - Grammatic Closure (ITPAGC)

Pretest differences among the schools revealed that Jefferson (31.212) scored lower than the other three schools. Hillcrest, Koelsch and McKinley scored 34.224, 36.193 and 35.474, respectively. The interaction between school and experience also was significant on the pretest analysis. The low scores at Jefferson indicated above were due largely to the fact that scores for the students working with experienced (Inservice Training) teachers were very low (26.604). All of the other groups scored similarly. The analysis of the gains revealed that experimental students gained more (3.540) than control students (0.021). Also, a grade by sex interaction existed. Females made greater gains at the first grade level while males were better performers at the second grade level. The grade by experience variable also was significant. At the first grade level, comparble gains were made by both experience groups, while at the second grade level, students working with inexperienced (no Inservice Training) teachers made the greater gains.

ITPA - Visual Closure (ITPAVC)

No significant differences existed among the levels of the independent variables on the pretest analysis. On the analysis of the gains differences were found between the two grades. The second grade (5.184) students made greater gains than first grade (3.981) students. The sex variable also was significant with females (5.807) making greater gains than males (3.517). The treatment variable, although nonsignificant, revealed the same trend as in all of the significant findings with the experimental group (5.526) having a higher mean gain than the control group (3.639).

ITPA - Auditory Memory (ITPAAM)

No differences were significant on the pretest analysis or on the analysis of the gains. Gains were extremely small (about 1.500) for all levels. The experimental group maintained its consistently higher mean gain (1.641 compared to 1.318).

ITPA - Visual Memory (ITPAVM)

The schools differed significantly from each other on the pretest analysis. McKinley (37.489) scored higher than Koelsch (31.934) with the means of the other schools falling between (Hillcrest, 32.557; Jefferson, 35.113). The pretest experience variable also was significant. Students taught by teachers with no Inservice Training scored higher (35,990) than students taught by teachers with Inservice Training (32.269). The sex by experience interaction adds more meaning to this when it is noted that no difference exists between the two experience groups if they are males. The difference between the two groups stated above is due largely to the substantial difference between the two groups for the female students. Although nonsignificant the gains made by the experimental group (4.196) again were greater than those made by the control group (2.821). The only significant source was the interaction between sex and treatment. Experimental males gained substantially over the controls, while control females made somewhat greater gains than the experimental females.

ITPA - Auditory Closure (ITPAAC)

Differences among the schools was indicated on the pretest analysis. Jefferson (31.280) scored somewhat lower than the other three schools (Hillcrest, 33.978; Koelsch, 33.541; McKinley, 34.775). The school by grade interaction also was significant. First grade students scored higher than second grade students at Hillcrest and Jefferson. At Koelsch and McKinley grade two students obtained higher scores. The school by experience interaction also was significant on the pretest analysis. At Hillcrest students assigned to experienced (Inservice Training) teachers obtained higher scores. At Jefferson the opposite was true. Only minute differences existed at the other two schools.

The treatment variable again was significant on the analysis of the gains. Experimental students gained 5.790 compared to 2.180 for control students.

ITPA - Sound Blending (ITPASB)

The pretest analyses indicated that differences existed among the four schools. Hillcrest (30.952) scored significantly lower than Jefferson (34.625), Koelsch (35.025) and McKinley (36.933). Pretest grade differences revealed that grade two students scored higher (36.398) than grade one students (32.741). Sex differences also were significant with females (36.197) scoring higher than males (33.153). The school by experience interaction was significant on the pretest analysis with students under experienced teachers scoring higher at Hillcrest and students under inexperienced teachers scoring higher at the other three schools. The analysis of the gains revealed that first grade students (11.913) made greater gains than second grade students (5.406). The Treatment variable also was significant with experimental students gaining 10.864 compared to 6.455 for the control students.

ITPA - Mean (ITPAM)

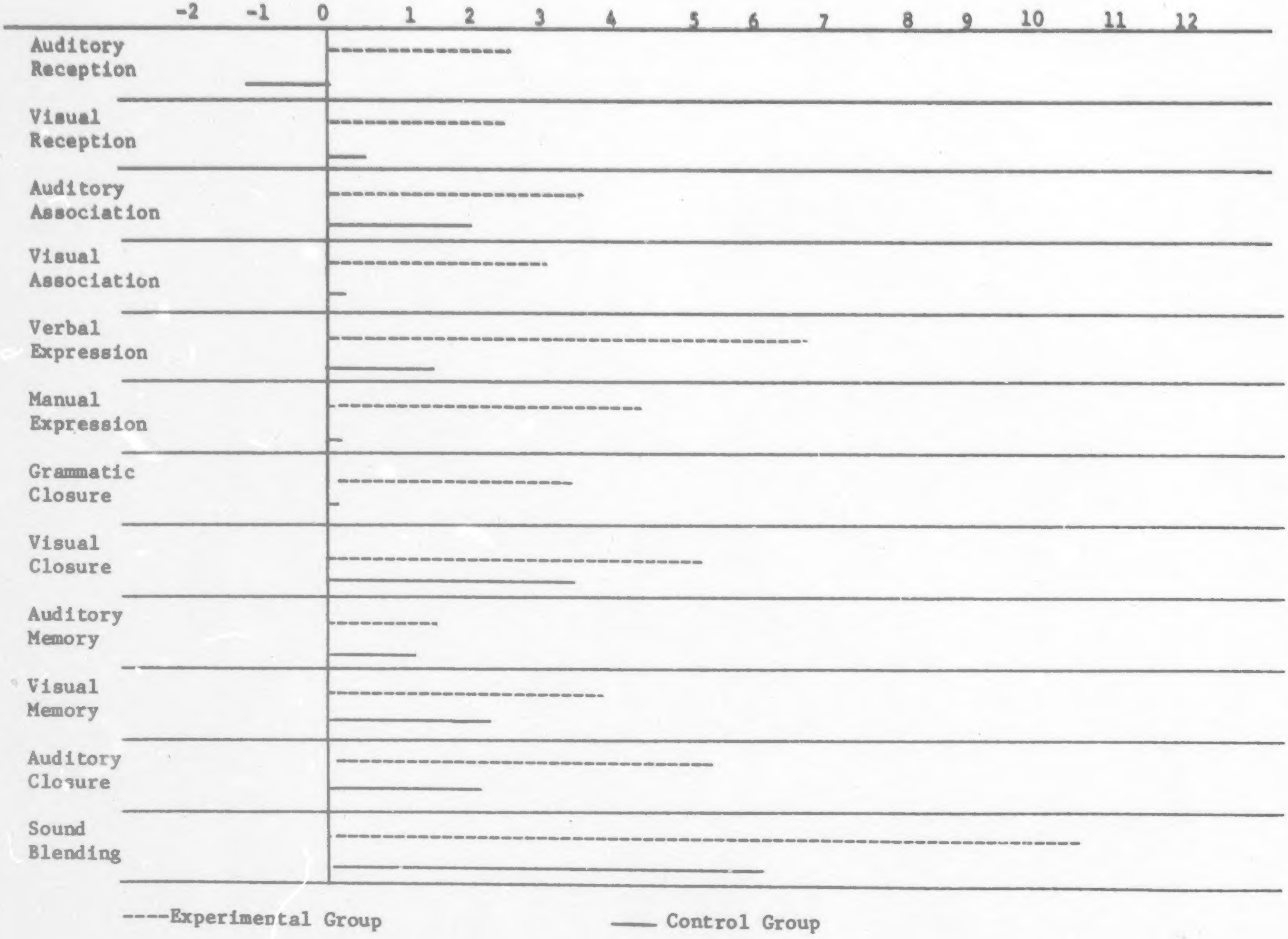
Only slight differences existed among the schools as measured by the pretest. The analysis of the gains again showed experimental students (4.123) making greater gains than control students (0.888).

Summary.

Although various differences existed on the analyses of the pretests, only one consistent response was evident on the analyses of the gains. The experimental group obtained greater gains on every subtest analysis than the control group. Thus, as on the analyses of the other measuring instruments, the experimental group maintained its superiority over the control group.

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Comparative Gains on ITPA



ANALYSIS OF THE McKINLEY FIRST GRADE

The in-service workshops provided by the Speech, Hearing, and Language Department of the Boise Public Schools stimulated staff interest at McKinley Elementary School to initiate a developmental first grade.

The concern about proper placement was met with a total screening of first grade entrants. Criteria for selection was determined by the standardized tests utilized. The selected tests included Metropolitan Readiness Test (Form A), Audiometric Screening, Visual Screening (Telebinocular and Snellen), Northwestern Syntax Screening Test, Perceptual Motor Tests, Wepman Auditory Discrimination Test, and Speech Articulation Tests.

Pupils placed in the developmental first grade were the fifteen children who appeared to have the greatest deficiencies. This placement did not allow for a control group for statistical analysis. However, the recorded scores did allow some comparisons of the developmental first grade and the remaining first grade classes. These comparisons should not be considered to mean that children with like difficulties were compared in different teaching environments; rather, it is a comparison of the children who indicated the greatest need for specialized help with the remaining population in the first grade.

The analysis of the McKinley first grade involved the variables of growth as indicated by the pretest and posttest scores. Since selection of the children for the developmental first grade was made on the basis of need rather than by a random selection, the differences between the developmental class and the other first grades were used for the analysis of growth. (Table A)

TABLE A

SIGNIFICANT DIFFERENCES BETWEEN THE DEVELOPMENTAL CLASS AND THE THREE OTHER FIRST GRADES METROPOLITAN SUBTESTS

Source	df	Word Meaning	Listening	Matching	Alphabet	Numbers	Copying	Total
Pretest	3	.01	.005	.005	.01	.0005	.0005	.0005
Posttest	3	.0005	.0005	.0005	.0005	.0005	.0005	.0005
Gain	3				.05			

The difference in gains made in the Alphabet subtest of the Metropolitan was significant at the .05 level of confidence. This indicates that the growth of the developmental class was greater than the mean of the remaining first grade classes. Difference in gains in the other subtest was not significant. However, Figure 1 and Table B indicate that the gains of the developmental class were greater than the gains of two groups of students in each subtest except listening.

TABLE B

COMPARATIVE GAINS IN METROPOLITAN READINESS SUBTESTS

Class	Word Meaning	Listening	Matching	Alphabet	Numbers	Copying
x	2.53	2.28	3.33	4.97	6.39	3.56
a	1.92	2.39	3.88	3.26	5.16	3.30
b	1.92	4.66	2.10	2.75	7.25	1.23
c	4.74	2.18	2.59	3.27	3.31	2.87

x - Developmental first grade
a-c - Gains from the three other first grades

The difference in gains was significant in the supplementary tests: draw-a-man, receptive language, expressive language, and auditory discrimination. (Table C)

TABLE C

SIGNIFICANT DIFFERENCES BETWEEN THE DEVELOPMENTAL CLASS AND THE THREE OTHER FIRST GRADES SUPPLEMENTARY TESTS

Source	df	Draw A Man	Receptive Language	Expressive Language	Auditory Reception	Perceptual Motor
Pretest	3		.001	.001	.0005	.05
Posttest	3		.025	.05		
Gain	3	.0005	.0005	.05	.005	

The gain in the perceptual motor area was greater in the developmental class than in the remaining three first grades. (Table D)

TABLE D

COMPARATIVE GAINS IN SUPPLEMENTARY TESTS

Class	Draw a Man	Receptive Language	Expressive Language	Auditory Reception	Perceptual Motor
x	2.61	7.03	6.75	4.64	.431
a	.61	4.38	4.30	2.28	.213
b	1.59	3.34	5.43	.89	.334
c	1.71	2.30	2.26	1.76	.057

x - Developmental first grade
a–c - Scores of remaining first grades

Draw-A-Man. The mean score gains on the Draw A Man test varied from 2.61 to .61. The developmental class made the greatest gain with the score of 2.61. The difference in gains is significant at the .0005 level of confidence. Pretest and posttest scores indicated that the developmental class was not significantly different from the remaining first grades.

Receptive Language. The mean score gains in the receptive language varied from 7.03 to 2.30. The developmental class made the greatest gain with the score of 7.03. The difference in gains is significant at the .0005 level of confidence. Pretest scores indicated that the scores of the developmental class were significantly lower than those of the remaining first grades .001 level of confidence. Posttest scores indicated that the scores of the developmental class were still significantly lower; however, the level of confidence was reduced to .025.

Expressive Language. The mean score gains in expressive language posttest varied from 6.75 to 2.26. The developmental class made the greatest gain with a score increase of 6.75. The difference in gains is significant at the .05 level of confidence. Pretest and posttest scores indicated that the developmental class was significantly lower at both periods. The level of confidence, however, decreased from .001 on pretest scores to .05 on the posttest scores.

Auditory Discrimination. The mean score gains of the first grade classes in auditory discrimination varied from 4.64 to .89. The developmental class made the greatest gain of the first grade groups with a score increase of 4.64. The difference in gains is significant at the .005 level of confidence. Pretest scores indicated that the mean score of the developmental class was significantly lower than the mean scores of the remaining first grade classes at the .005 level of confidence. Posttest scores indicated that the mean score of the developmental class was no longer significantly different from the mean scores of the other first grade classes. This change would indicate a greater similarity in discrimination ability at the time of the posttest.

Perceptual Motor. The mean score gains varied from .0566 to .4306. The developmental class made the greatest gain with the score increase of .4306. The posttest mean score of the developmental first grade was not significantly different from the other first grades. The pretest scores, however, did indicate a significant difference at the .05 level of confidence. This would indicate growth by the developmental class to the norm of the first grade.

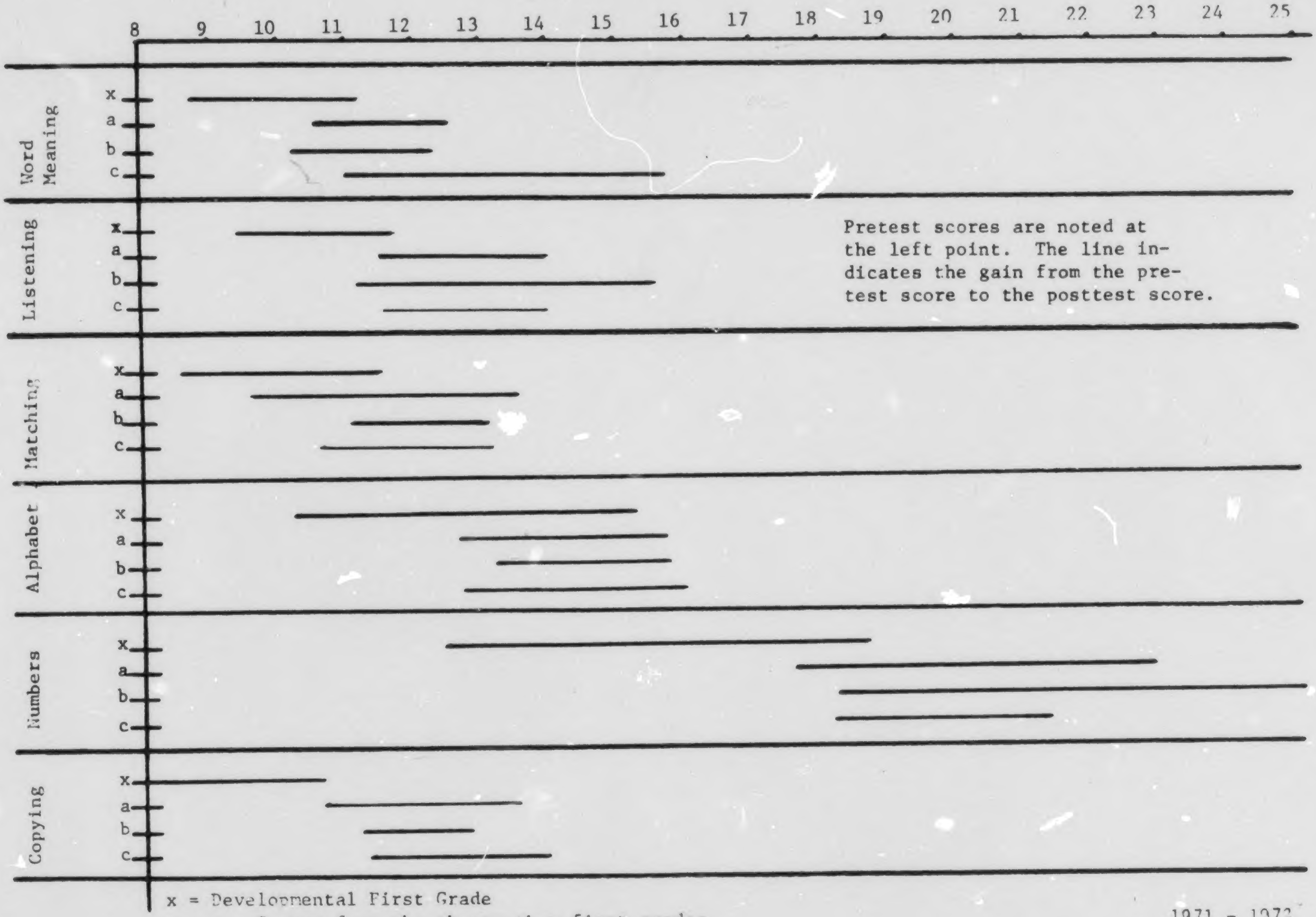
SUMMARY:

The subtest of the Metropolitan indicated the developmental first grade pupils started the school year at a lower level, and also finished at a lower level than the remaining groups. It is noted, however, that the developmental class made greater gains than two other groups on all of the subtests except listening. The gain of the developmental first grade was significantly greater than all of the remaining groups on the Alphabet subtest.

The supplementary tests indicated a greater gain by the developmental first grade in draw-a-man, receptive language, expressive language, and auditory reception.

The analysis of variances indicated that the McKinley Developmental First Grade pupils, although significantly lower in readiness, maintained the same growth rate of the remaining population in six of eleven areas, and made significantly greater gains in growth in the remaining five areas.

Comparative Pretest and Posttest Scores
Metropolitan Subtests
McKinley School

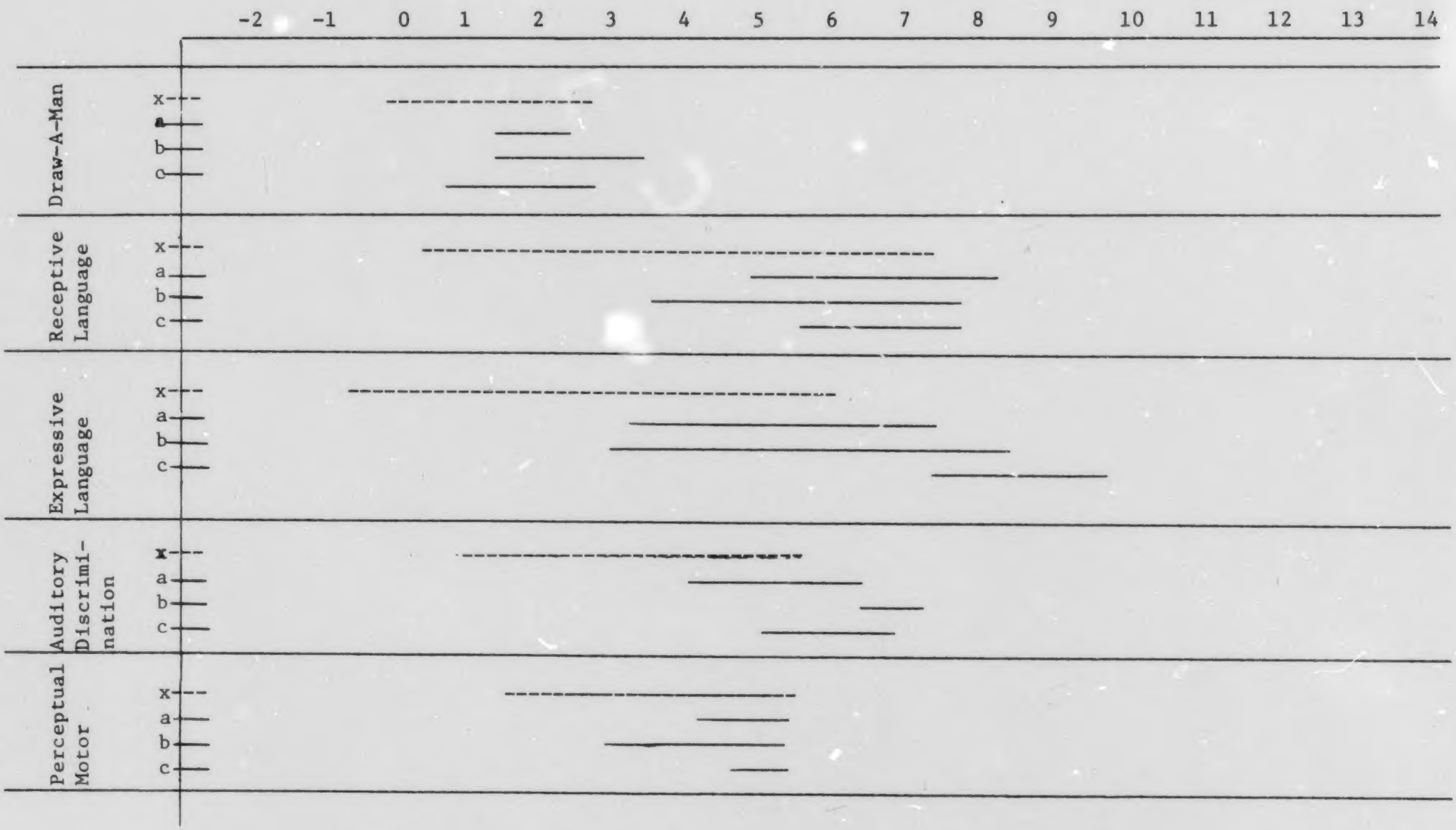


Pretest scores are noted at the left point. The line indicates the gain from the pretest score to the posttest score.

x = Developmental First Grade
a - c = Scores from the three other first grades

1971 - 1972

Comparative Pretest and Posttest Scores
Supplementary Tests
McKinley School



x = Developmental First Grade
a - c = Scores from the three other first grades

4. ADOPTION OF THE PROJECT

a. Boise Public Schools

The adoption of the Auditory Perceptual and Language Development Training Program by the McKinley School at the beginning of the 1971-72 school year provided an excellent experiment for the evaluation of the methods and materials that were employed in the project in a classroom situation with regular teachers trained in the method conducting the program. These classes also served as a demonstration model for visitors to the project and for teachers and administrators within the Boise Public Schools.

As a result of the success of the program within the regular school environment, which was verified by the statistical data from the developmental first grade test results and the subjective reports of the classroom teachers at McKinley School, which are included earlier in this report, several principals requested permission from the administration to implement developmental first grades in their schools. Permission was granted to the principal of only one school (Garfield School) outside of the project area, because of the lack of space and trained personnel to implement and conduct the program. The plans for the pre-testing and selection of the high risk children to be placed in the developmental first grade in Garfield School were developed prior to the close of the school year.

The teacher who will conduct the developmental first grade class at Garfield School visited the developmental first grade class at McKinley School several times, and attended the last three in-service training workshops in the spring. She was given the complete outlines of the methods and materials used in the training program to study and prepare materials over the summer. She will be given additional training by project personnel during the next school year.

The project clinicians will remain at the project schools, where they will continue to test and train the children in the first and second grades who are identified as having severe auditory perceptual and language deficits. They will also diagnose those children referred by the classroom teachers in the higher elementary grades as exhibiting auditory perceptual and language dysfunctions, and prescribe training procedures to be used in the classroom setting. They will act as supportive personnel to the teachers in the project schools. They will conduct workshops for teachers in schools other than project schools when deemed feasible.

It is anticipated that the acceptance and implementation of the developmental training program in regular classrooms will expand each year as space permits, as personnel is trained in the method, and as funds are available for the purchase of the materials necessary to successfully employ the method.

The speech and hearing clinicians who have had the advantage of the in-service training will utilize as many of the testing procedures and training techniques as is possible on an itinerant basis. They will also act as resource personnel in the schools to which they are assigned.

b. Private Schools

The teachers from the parochial schools in Boise, who were enrolled in the in-service training program, expressed their appreciation for being invited to attend the workshops. They indicated that they had increased their awareness and knowledge of learning disabilities in general and of auditory learning problems specifically, and asserted that the workshops had served as a "springboard" for further advancement.

However, they claimed that it would be impossible to establish classes for auditory perceptual and language development training in the parochial schools, because of the limited space and the dearth of teachers in their schools at the present time. They stated that the only means of any specific help for learning disabled children within their population would be through the enlistment of paraprofessionals, and expressed the hope that some of the parents, who were former teachers, might volunteer their time for this purpose.

They borrowed the Title III film, "Early Recognition of Learning Disabilities" and showed it at their PTA meetings to create an awareness of learning problems and stimulate an interest in helping children overcome them. They felt that there was a positive response from the parents, and hopefully they will be able to enlist some of them for volunteers in the coming school year.

c. Public Schools in Idaho

The responses from the visitors to the project from the public schools throughout Idaho indicated that many of the school districts represented had included parts of the Auditory Perceptual and Language Development Training Program in their regular curriculum upon returning to their respective schools. Others were making plans for in-service training for their primary teachers and collecting materials in preparation for the implementation of the developmental program in their first grade and remedial classes for the next school year.

Some of the visitors indicated that they would request workshops to be conducted in their areas by project presonnel through the Title III State Office of Dissemination, State Department of Education.

Some representative post-visit reports from classroom teachers, resource teachers, speech clinicians, principals, superintendents, and members of boards of trustees are reproduced below:

REPORT ON VISIT TO AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

I visited the project office and two of the project schools, Hillcrest and Jefferson, on March 2, 1972. The following is my report on my observations that day:

A. A description of the project

This project is designed to help children who have learning disabilities because of poor auditory perception and/or language development. There is a screening program for all first and second graders in the four project schools in Boise-Jefferson, Koelsch, Hillcrest, and McKinley. In the screening program the teachers use a checklist to help them identify these children. Also the speech and hearing staff give tests. After these children are identified, there is a sequential, developmental program that begins with very basic motor, auditory, and visual perception training and also language development. At Jefferson, Koelsch, and Hillcrest each of these children receives thirty minutes a day, four days a week, of this training. At McKinley there is a developmental first grade with fifteen children, which has integrated this program into its entire year's curriculum.

B. Visitor's impression of the project

I feel that this project is a very exceptional one. It is helping children who are too many times overlooked, because this handicap is not visible but causes them to have a severe learning disability. I feel that it begins in the right place by beginning in the first and second grades where the problem begins to show itself. I was very impressed by the personnel working in this project. Each seemed enthusiastic about his work and was getting very good results.

C. Visitor's opinion of the applicability of project practices to his home school or district

I think that the project practices I observed could be applied to our district. I feel that we have the facilities and much of the materials are very inexpensive or could be easily made. I also feel that a good teacher has already integrated some of these practices into her teaching.

D. Recommendation to the local home district regarding the practices observed

I was very excited after my day's observation and I have several recommendations. (1) If we were not able to have personnel work with these children individually I would like to recommend that all first and second grade teachers incorporate many of these practices into their classrooms. (2) I would like to recommend that we have some of the excellent personnel from this project come for our in-service and instruct us how to identify these children and how to use these practices. (3) I also recommend that we put these project practices into our kindergarten program.

Submitted by

First Grade Teacher

TITLE III VISIT PROGRAM

AUDITORY PERCEPTION AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
Boise Independent School District

A. A description of the project

This is an auditory discrimination training program for children with learning disabilities. It is federally funded by Title III. After children were identified specific standardized tests were used in sequence to determine the nature and extent of the dysfunction. Therapists used standardized (objective) tests not only to determine the nature and extent of the dysfunction, but also to measure the progress that is made within a given period of time. These tests are largely individual.

B. Visitor's impression of the project

I was highly impressed with the project. Working with two children for a period of time away from the classroom situation seems to me a tremendous learning impact for those needing special assistance. The feedback in this type of situation seems to have been more than satisfactory with learning progress and retention of material learned. Positive reinforcement is stressed with each pupil experiencing success rather than failure often associated with children who find learning difficult. I was impressed with the organization of the program. The personnel involved were skillfully trained, consistant in teaching methods and discipline. They were enthusiastic about the program and felt they were getting material across to these children.

C. Visitor's opinion of the applicability of project practices to his home school or district

Available funds would limit our district in establishing such a program at the present time. However, perhaps it could be modified. Boise has rented trailers for three years with option to buy, to use as learning centers. Right now, our district does not have available space. However, if interested teachers could be trained in workshops, this program could function within the classroom.

D. Recommendation to the local home district regarding the practices observed

I would certainly recommend the teaching practices and methods I observed. I feel working with a teacher-pupil situation is ideal. The depth and thoroughness of the program was in evidence. I feel this type of program, properly handled, could only bring the results needed to benefit children with disabilities in learning.

Submitted by

____
Second Grade Teacher
Lincoln School

VISIT, TITLE III ESEA

A. Description of the project

The Auditory Perceptual and Language Development Training Program grew out of a need to identify then diagnose and train the children who have auditory perceptual problems severe enough to interfere with auditory learning in a classroom. These children were then provided with a structured, sequential training program to improve communication skills so they could perform adequately in the classroom.

The training is very structured beginning with the very basic skills of discriminating gross sounds and their association with letters.

The therapists are speech and hearing personnel who take two children at a time for half an hour daily. Although the program included children through grade 4 last year, this year they have included only those in grades 1 and 2.

B. My impression of the program

The last three years I have taught learning disability classes in Seattle so I have studied many auditory programs looking for the most effective one. This is unquestionably the best program I have seen for several reasons:

1. The testing has been refined to be able to find these children in the first grade with little screening time.
2. Children are picked up in the first grade before they develop more problems and experience failure.
3. It integrates all of the perceptual skills.
4. There is a constant, on-going training program. Not only weekly sessions for the therapists but monthly sessions for the teachers whose children are involved.
5. The entire program takes only about 20 weeks to complete and the child is able to function well in a regular classroom.
6. They are trying to adapt this program so that it can be used in a classroom by the regular teacher.

C. Applicability to our district

This program is of course applicable to our district as well as any other school district. We have many children with auditory problems. In fact, probably over half of the children in our learning disability classes could have been taken care of with this program in a 20 week period, in place of the year or two in a special full time class. This would of course be true if they were trained during their first grade year. We will never solve our reading problem until we start taking care of the 6-7 year olds. It is possible to predict failure at this early age and this is the kind of program that could prevent much failure.

An important part of this program is also that of working with parents. They have monthly meetings of parents of children working in this program. In our district we have many interested, concerned parents who would be most happy to learn what they could do at home to help these children with perceptual problems. A great deal could be accomplished in this way.

D. Recommendations to our district

Since this is a Title III Project, it is available for our use in its entirety. Even though the final results are not tabulated, we could see the gains that had been made by the children observed. Those of us at East Side who visited the project have been trying it out with children here and are most impressed! We know for a fact that we have many children who would really benefit from such a program. We know for a fact that we need to identify these children at an early age. With this in mind my recommendations are:

1. Start the program in one school in Sept. of 1972. This would require one full time teacher (any of those who observed in Boise could further train herself through the summer to be prepared.) The teacher could screen all first grade children and would find 18 that she could work with each day.
2. The teacher could work with the children 4 days a week leaving one day for planning, working with other teachers in the building, and working with parents.
3. Since this would be a full time job in itself, the teacher should not be considered a Resource Teacher also. The school would still need a full time Resource Teacher to help with all areas of the curriculum.

Signed
East Side Resource Teacher

AUDITORY PERCEPTUAL & LANGUAGE DEVELOPMENT TRAINING PROGRAM
TITLE III 89-10 70-13
Boise Public Schools

A. Description of project

The Project Coordinator, a member of the Title III, ESEA staff, was our hostess for the day of December 13, 1971. She gave us an orientation to the project by stating that its beginnings originated from the annual hearing survey conducted in the Boise Public Schools three years ago. Apparently, a number of children had difficulty on the hearing screening test with regards to localization of sound. This difficulty of localization brought about an interest in auditory perception and its relation to language development. A program was written to study and research those children demonstrating a specific problem in auditory learning. The project was then submitted and approved for federal funding. The project employs a supervisor and five qualified speech and hearing therapists. It involves children in grades 1-4 from four of the Boise Public Elementary Schools. The Coordinator explained that throughout the project the children in grades 1 and 2 have demonstrated significant gains while those children in grades 3 and 4 have profited minimally. Her explanation for this was that the older children had formed such bad habits through compensation that there was little transference of improvement to the classroom. It appears that the earlier children with auditory and language problems can be identified the better the prognosis for remediation and ultimate classroom success.

B. Visitor's impression of project

The project appeared to be of extreme value to the participants, particularly those of the 1st and 2nd grades. The children involved appeared excited about their particular tasks and when performed to the satisfaction of the therapist were verbally rewarded and reinforced for their accepted response. Successive approximations were also accepted and reinforced through verbalization. The therapists observed were obviously well trained and prepared for their arduous assignment. They are to be complimented for their keen insight into each child's needs. The Director of the Title III and her staff are to be highly complimented for their time, efforts, and devotion to a project that appears to have significant promise in the future remediation of learning disabilities in the public school systems.

C. Visitor's opinion of applicability of project practices to his home school or district

The applicability of this program or one similar has potential to benefit many of the children enrolled in the Butte County Public Schools. A significant number of children in the Butte County Schools, especially in grades 1 and 2, have been observed to have difficulties with sound localization when administered an audiometric screening test. These same children have been followed up in the classroom situation and most are having difficulty adjusting to school and its prescribed curriculum. These children as tested by the ITPA are delayed in language development and would undoubtedly profit from a program of auditory stimulation and language development designed to their specific needs.

D. Recommendation to local home district regarding practices observed

It is recommended that the Butte County Schools further survey their needs in the area of language development among the 1st and 2nd grade children. In addition, it is further recommended that the feasibility of a summer speech and language development program for pre-school children be considered in order to identify children with a specific problem in auditory learning and delayed language development as soon as possible. From the evidence of most research data, including that of the Boise Public Schools Title III Project, it would appear to be a sound and reasonable investigation that could pay large dividends in the remediation of the children enrolled in the Butte County Schools who are experiencing frustration and failure as a result of delayed language development.

Submitted by

____

Speech Therapist
Butte County Schools

AUDITORY PERCEPTION AND LANGUAGE DEVELOPMENT PROGRAM
Boise Independent School District
Post-Visit Report

A. Description of project

The project visitors received a briefing at the Central Project Office prior to visiting two of the schools where project personnel were working directly with the children.

The project consists of specially trained personnel working with selected primary children who have identified learning problems of auditory and visual perception, and those who have trouble with integration of these factors.

The children involved in the project are referred to the project office by means of identification check lists completed by teachers. Further tests are given to gain a measurement of the I.Q. and areas of academic difficulty. Final selection is made by project personnel who then progress through a highly structured and integrated program designed to aid in making significant contributions toward academic achievement and improved self-image for the children.

B. Visitor's impressions

The first impression of this writer was to question the feasibility of the large expenditure of funds to produce results with such a limited number of students.

However, upon considering that this program is a research project, concurrence is given that the funds seem to be well spent to provide this additional knowledge for the cause of education.

The project personnel appeared to be dedicated to these children who have the learning problems.

C. Applicability to home district

The worth of the results gained from this study would, without question, be of benefit to any school district where similar learning disabilities are present. Therefore, the children of this school district could and should be assisted to progress educationally by using methods and materials proven successful by this research project.

D. Recommendations to home district

It is this writer's recommendation that a similar project be initiated for identification of specific auditory and visual discrimination problems of the children within the district and to make a determination of a special program which would enhance the education of the children in the primary grades.

If a significant number of children are found to be lacking in these areas of learning, further consideration should be given to the establishment of a program to provide opportunities for achievement necessary to encourage and stimulate educational growth.

Signed
Principal

AUDITORY PERCEPTION AND LANGUAGE DEVELOPMENT PROGRAM
Boise, Idaho
Post-Visit Report

A. Description of project

Since this is a research project much time has been spent in testing first and second grade children to identify those with learning disabilities and establish the active experimental group and a control group. Those chosen for training leave their classrooms on a set schedule and report to the teacher for a half hour session of therapy. This teacher works with two children at a time.

Work begins on basic developmental skills. Motor development in establishing handedness, awareness of right and left, establishing body image is one element of individual instruction.

Exercises in increasing memory span are included. Special relationships and color concepts are emphasised. Letter sounds and blendings are included. These are approached in cursive writing and the child taught to trace and write the letters in this manner. The children are taught sounds and reading through the avenue of writing.

Materials used in teaching were simple, many home-made, and relatively inexpensive. Classes were held in attractive, but small areas.

Post testing is planned to establish growth of the control and active groups.

B. Visitor's impression of the project

This experiment is being conducted in a very scientific manner. No doubt when it is no longer experimental not so much time will be used in identifying the children and more available to actual work with children. This could be a preventative procedure to eliminate need for remedial teaching in the upper grades. I hope records will be kept on these children to establish this.

The personnel working on the project is dedicated, enthusiastic and well trained. I anticipate they will prove their ideas successful.

Signed
Principal

AUDITORY PERCEPTION AND LANGUAGE DEVELOPMENT PROGRAM

A. Description of project

Auditory Perception and Language Development Training Program.

B. Visitor's impression of project

I was very favorably impressed with the project. It had many ideas which I felt were significant for the development of the learning processes in children.

C. Visitor's opinion of applicability of project practices to home school or district

I feel that we can use parts of the development program in conjunction with the present teaching practices in our school. The early introduction of developmental exercises and learning methods could help all children.

D. Recommendation to the local home district regarding practices observed

I feel that we should implement the practical parts of the program into our regular school program. We would not be able to afford special teachers, but the meat of the program could be used with all children for short periods each day. If such a program were developed by the State Department of Education and presented to the local schools so that regular classroom teachers could use the material it would really be a help to education in Idaho.

I also feel that the developmental program could be used in a kindergarten situation. If such a program were developed for this age group I think it would make the kindergarten program one that I could support. I feel that the kindergarten program at present would be too expensive for the good that would be derived.

Signed
Superintendent of Schools

AUDITORY PERCEPTION AND LANGUAGE DEVELOPMENT PROGRAM

A. Description of project

Auditory Perception and Language Development Training Program.

B. Visitor's impression of project

The project was a real fine thing. It had many things that I feel we need in our primary program.

C. Visitor's opinion of the applicability of project practices to his home school or district

I feel we can use parts of the program in our present program, and we are planning to develop a program in the county that will help the students with learning difficulties.

D. Recommendation to local home district regarding practices observed

We have talked about this with the superintendent, and he feels we can include parts of the program in our regular classroom situation. We are also trying to get a program into operation in the county which would operate quite similarly to the one in Boise.

Signed
Board of Trustees

AUDITORY DISCRIMINATION TRAINING PROGRAM

The afternoon spent at Boise learning about the Auditory Discrimination Experimental Program was outstanding. It helped the teacher recognize the skills so often taken for granted that some children lack.

Certainly the visitation gave teachers ideas on how to diagnose such disabilities and structure learning situations to compensate for such lack of skills.

Since returning to the Plummer School District, the teachers have tried quite a few of the ideas observed in the visitation.

> We are attempting as much as financial means allow to develop an individualized instruction program, and in the future we hope to have a full scale program.

Signed
Superintendent of Schools

No objective measures of the extent to which the project program has been adopted or will be adopted in the future have been made by this office. However, a Visit Program Questionnaire Follow-Up was prepared and sent out by the Title III Office for Dissemination in the State Department of Education to the persons throughout the State who visited the project. Of the thirteen teachers who completed the questionnaire nine gave a positive response to the question, "Did you adopt or adapt to your classroom use any idea, technique, or practice of the project visited?"

C. INVOLVEMENT OF CULTURAL AND NON-PUBLIC AGENCIES

The greatest involvement of cultural and non-public agencies was created by the workshops conducted by the nationally recognized specialists in the field of learning disabilities, when selected personnel from the medical profession, colleges, universities, and parochial schools, listed previously in this report, was invited to participate in the workshops with Doris Johnson, Dr. Jeanne McCarthy, Zee Swearengin and Hal Dobkins, Dr. Gerald Freeman, and Dr. N. J. Christensen.

Evening meetings were also arranged with the consultants so that parents, college students, teachers, and other persons interested in learning disabilities, who were unable to attend the workshops, might have an opportunity to hear the specialists.

Another extremely important involvement of a non-public educational agency was the participation of five teachers from the Catholic Schools in Boise in the in-service training workshops in the final year of the project. They were given all of the printed materials that were handed out in the workshops the first year as well as those handed out in the final year. They participated in all workshop activities, and collected and constructed materials to initiate the training procedures in their classrooms. They also attended the all-day workshops conducted by Dr. Gerald Freeman and Dr. N. J. Christensen,and their substitutes were paid with Title III funds.

Program presentations have involved several groups of undergraduate students in teacher training programs at Boise State College and Northwest Nazarene College at Nampa, Idaho. Creating an awareness of learning disabilities in general, and auditory learning problems specifically, is a highly relevant involvement of non-public educational agencies, particularly the institutions involved in training teachers.

Part III

DISSEMINATION REPORT

PART III - DISSEMINATION REPORT

A. METHODS OF DISSEMINATION

Dissemination regarding the development of the project, the identification and testing procedures, and the methods and materials employed in the Auditory Perceptual and Language Development Training Program was continuous from the inception to the termination of the project.

Since dissemination was one of the major objectives of the project, the items disseminated and the methods of dissemination were included in this report under Specific Objectives and Activities, Pages 41-49.

B. ITEMS PRODUCED

The items produced during the operation of the project and disseminated widely were:

1. Brochure on the development and expansion of the project within the Boise Public Schools.
2. Colored slides with a synchronized taped narrative on the development of the project, the diagnostic testing, and the training procedures employed in the Title III Auditory Perceptual and Language Development Training Program.
3. Colored slides and a synchronized taped narrative of the screening and training procedures for the developmental first grade class at McKinley School, which was a direct outgrowth of the Title III project.
4. Video taped recordings of:
    a. Testing procedures for screening the first grade entrants at McKinley School in August 1971 for the selection of

the fifteen children placed in the developmental first grade class.

   b. The sequential training techniques employed with the two children in one project class conducted by the project coordinator at the Jefferson School unit.

5. Booklet made up of colored pictures depicting the various aspects of the project, and pictures of children involved in activities, which highlight the sequential phases of the program, accompanied by an explanation of each picture.
6. Outlines of the educational information presented to the thirty-five participants in the in-service workshops.
7. Handbook for parents and teachers entitled, Developing a Child's Potential. The outlines of the educational information presented in the in-service training workshops were revised and expanded and contained in the separate booklet. The various sections of the outlines are color coded for easy reference to each phase of the program:
   a. Child Development
   b. Identification and Testing Procedures
   c. Perceptual Training
      1. Motor
      2. Auditory
      3. Visual
   d. Language Development
   e. Lesson Plans
   f. Instructional Materials
   g. Bibliography
8. Final Report

C. ITEMS DISSEMINATED

The items disseminated through the State Title III Office and/or the project office regarding the Auditory Perceptual and Language Development Training Program are summarized:

1. Original proposal for planning grant
2. Application for operational grant
3. Application for continuation grant
4. Brochure
5. Outlines of presentations in in-service training workshops
6. Colored slides with synchronized taped narratives
7. Video-recorded tapes
8. Booklet of colored pictures with accompanying descriptions
9. Handbook of perceptual and language development for parents and teachers entitled, Developing a Child's Potential.
10. Final report

PART IV

FINAL EXPENDITURE REPORT

PROPOSED BUDGET SUMMARY, OR
EXPENDITURE REPORT OF FEDERAL FUNDS
ELEMENTARY AND SECONDARY EDUCATION ACT, TITLE III, P. L. 89-10, as amended

Name and Address of Local Agency
INDEPENDENT SCHOOL DISTRICT OF BOISE CITY
1207 Fort Street
Boise, Idaho 83702

Funds for Special Education Programs for Handicapped Children $ 74,840.00

PROJECT NUMBER 70-13 BUDGET PERIOD: Begin 7-1-71 End 9-30-72

Check One / / Proposed Budget Summary / / Estimated Expenditure Report / / Final Expenditure Report

EXPENDITURE ACCOUNTS		EXPENSE CLASSIFICATION							
FUNCTIONAL CLASSIFICATION	ACCT. NO.	SALARIES		CONTRACTED SERVICES	MATERIALS AND SUPPLIES	TRAVEL	EQUIPMENT	OTHER EXPENSES	TOTAL EXPENDITURES
		PROFESSIONAL	NON-PROFESSIONAL						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Administration	100	$ 608.00	$ 4,727.76	$	$ 952.29	$ 753.71	$	$ 200.00	$ 7,241.76
2. Instruction	200	55,271.16	2,657.00	2,908.32	1,435.64	1,393.91	376.50		64,042.53
3. Attendance Service	300								
4. Health Services	400								
5. Pupil Transp Serv	500								
6. Operation of Plant	600							915.71	915.71
7. Maint. of Plant	700							120.00	120.00
8. Fixed Charges (Except 830)	800								
9. Leasing of Facilities	830						2,520.00		2,520.00
10. Food Services	900								
11. Student Body Activ	1000								
12. Community Service	1100								
13. Improve to Sites	1210C								
14. Remodeling (over $2,000	1220								
15. Remodeling ($2,000 or less)	1220C								
16. Capital Outlay (Equipment only)	1230								
17. Total Local Expend		$ 55,879.16	$ 7,384.76	$ 2,908.32	$ 2,387.93	$ 2,147.62	$ 376.50	$3,755.71	$ 74,840.00
18. Negotiated Budget		$ 52,075.00	$ 7,741.86	$ 5,600.00	$ 2,598.05	$ 2,500.00	$ 500.00	$3,474.80	$ 74,840.00
19. Unexpended Balance of Funds Authorized for Expenditures; Total of Line 18 minus Total of Line 17 ---------									

THIS FISCAL REPORT IS CORRECT AND THE EXPENDITURES INCLUDED HEREIN ARE DEEMED PROPERLY CHARGEABLE TO THE GRANT AWARD.

Signature of Person Authorized to Receive Grant
Dorothy D. Secord

Date Reported November 2, 1972

PART V

APPENDICES

APPENDIX A

Evaluative Instruments and Questionnaires

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
TITLE III 89-10 70-13

Boise Public Schools

CHECK LIST FOR IDENTIFICATION OF A CHILD WITH A LEARNING DISABILITY

Pupil's Name____Birth Date________________

School____Grade_______Age______________________

Teacher's Name____Date____________________

_____1. Does he have average or above average intelligence?

_____2. Is he repeating or has he repeated a grade? Which grade?_______

_____3. Does he have poor body image?

4. Does he have poor coordination?
   _____a. Is he awkward, clumsy, and bumps into things?
   _____b. Does he have difficulty in walking, hopping, skipping, throwing and catching a ball?
   _____c. Does he have poor balance?
   _____d. Does he have difficulty handling a pencil, scissors, etc.?
   _____e. Does he have difficulty writing?

5. Does he have poor visual perception?
   _____a. Does he see figures, letters, or numbers reversed, inverted, or rotated? b-d, p-q, u-n, n-h, m-w, 6-9, etc.?
   _____b. Does he see letters and numbers transposed? no-on, was-saw, 12-21?

6. Does he have poor auditory perception?
   _____a. Can he distinguish between high and low tones?
   _____b. Can he discriminate between speech sounds? p-t, t-k, f-th, th-s?
   _____c. Does he confuse words that sound alike?

7. Does he have poor memory?
   _____a. Does he have difficulty in following directions?
   _____b. Does he have difficulty in copying material from the board?
   _____c. Does he have difficulty in retaining and recalling what he has learned?

8. Does he have developmental defects in speech and language?
   _____a. Does he omit or substitute sounds in words?
   _____b. Does he substitute one word for another?
   _____c. Does he have difficulty with pronouns and verbs?
   _____d. Does he have difficulty with classifications and categories?
   _____e. Does he have difficulty in expressing his thoughts?

9. Does he have difficulty with relationships?
   _____a. tall-short, thin-thick, etc.
   _____b. tall-taller-tallest, etc.

10. Does he have poor directionality?
   _____a. Does he have difficulty learning left-right, up-down, forward-backward?
   _____b. Does he have difficulty in learning which way the hands on the clock turn?

11. Does he have specific learning difficulties in reading, writing, or spelling?

Put a heavy check mark by each item that you feel is applicable to the child.

FORM NO 53- 11-65-5M

Boise Public Schools
AUDIOMETER TEST

AUDIOGRAM OF .... Age

Address ....

School .... **Grade** ....

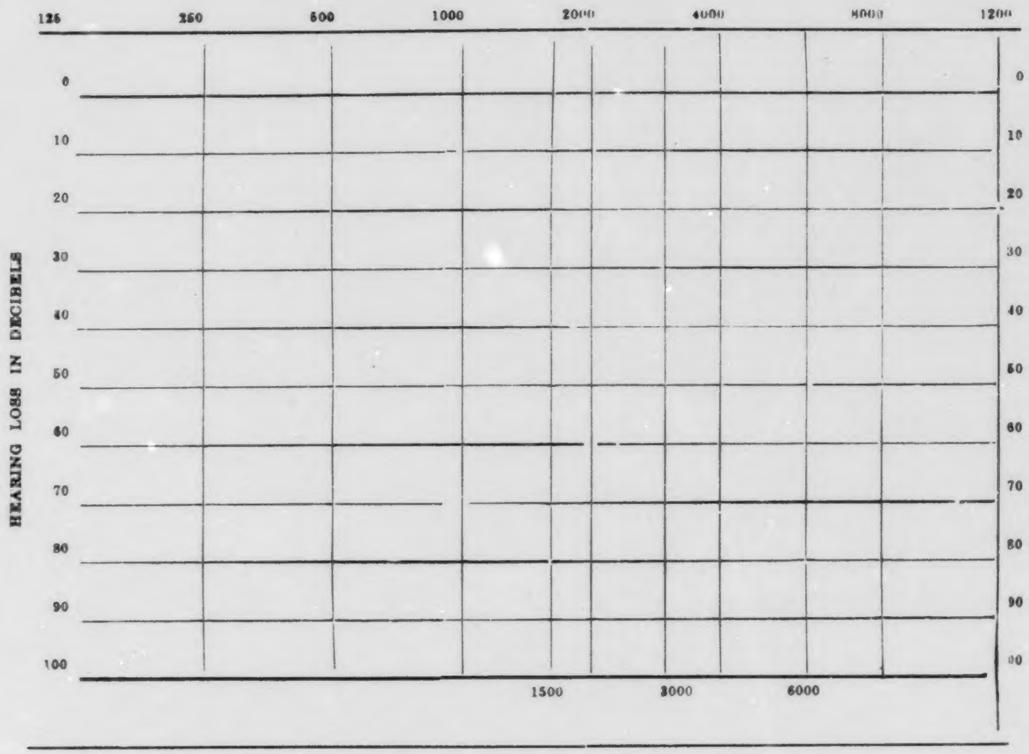
Audiogram made by .... Date ....

AVERAGE HEARING LOSS COMPUTED FROM AUDIOGRAM: **Total Average:** R .... L ....

Average Normal Hearing

Right—O (Use red pencil)

Left—X (Use blue pencil)



Remarks: ....

....

....

....

....

BOISE PUBLIC SCHOOLS

SPEECH RECORD

NAME ____________________ AGE ________ GRADE ________

SCHOOL ____________________ TEACHER ____________________ DATE ____________________

SPEECH MUSCULATURE: Normal ________ HEARING: Normal _____ Defective L_____ R______

KEY: Mark substitutions with sound substituted; omissions (-); indistinct (ind).

DATE: DATE:

		Test One				Retest		
CARD	CHECK WORDS	1.	2.	3.	COMMENTS	1.	2.	3.
1.	Sun, biCYcle, buS							
2.	Sled, STairs, SQUirrel							
3.	Zipper, SciSSors, noSe							
4.	THumb, tooTHbrush, teeTH							
5.	THRead, feaTHer, swiNG							
6.	Red, baRn, caR							
	Yellow, House, WHite							
7.	TRee, ice CReam cone, DRum							
8.	Lamp, baLLoon, baLL							
9.	airPLane, CLock, BLocks							
10.	Jacks, soLDIer, oranGE							
11.	Chair, pitCHer, watCH							
12.	SHoe, waSHing maCHine, fiSH							
13.	Cat, ChiCKen, milK							
14.	Gun, waGon, piG							
15.	Fork, telePHone, kniFe							
16.	Valentine, daVenport, stoVe							

GOLDMAN-FRISTOE-WOODCOCK
TEST OF AUDITORY DISCRIMINATION

By Ronald Goldman, Ph.D.; Macalyne Fristoe, M.S.; and Richard W. Woodcock, Ed.D.

AGS

TRAINING PROCEDURE
Words Failed to Train
TOTAL WORDS ___
TEST WORDS(*) ___

QUIET SUBTEST
TOTAL ERRORS ___
PERCENTILE RANK ___
PAUSES ___

NOISE SUBTEST
TOTAL ERRORS ___
PERCENTILE RANK ___
PAUSES ___

NAME ___ AGE ___ GRADE ___ SCHOOL ___

TEACHER ___ DATE ___ EXAMINER ___

COMMENTS ___

Tape Player: Make ___ Model ___ Earphones Used: ☐ Yes ☐ No Pretraining with Large Training Plates: ☐ Yes ☐ No

TRAINING PROCEDURE

Indicate correct responses by a (+), incorrect responses by a zero (0). Blank spaces indicate trial not administered.

Plate	Stimulus Word	Trial 1	Trial 2	Trial 3
1:	chair	___	___	___
	she	___	___	___
2:	light	___	___	___
	tack	___	___	___*
3:	see	___	___	___
	cash	___	___	___*
4:	cab	___	___	___*
	comb	___	___	___
5:	core	___	___	___
	bear	___	___	___*
6:	shack	___	___	___
	fat	___	___	___
7:	path	___	___	___
	bite	___	___	___
8:	core	___	___	___
	hair	___	___	___*
9:	fair	___	___	___*
	write	___	___	___
10:	lake	___	___	___*
	nail	___	___	___
11:	pack	___	___	___*
	sail	___	___	___*
12:	vine	___	___	___*
	night	___	___	___*
13:	shine	___	___	___
	dig	___	___	___*
14:	line	___	___	___
	hat	___	___	___
15:	cab	___	___	___
	me	___	___	___*
16:	make	___	___	___*
	sack	___	___	___

Return to Plate 1 and present the second pair of stimulus words.

Plate	Stimulus Word	Trial 1	Trial 2	Trial 3
1:	coal	___	___	___*
	mail	___	___	___*
2:	veil	___	___	___
	key	___	___	___
3:	rail	___	___	___
	pat	___	___	___
4:	back	___	___	___*
	bee	___	___	___*
5:	pea	___	___	___
	patch	___	___	___
6:	cone	___	___	___*
	tear	___	___	___
7:	sat	___	___	___
	wake	___	___	___*
8:	knee	___	___	___*
	tail	___	___	___
9:	shack	___	___	___*
	pig	___	___	___
10:	pear	___	___	___
	tea	___	___	___*
11:	sign	___	___	___*
	cat	___	___	___
12:	wig	___	___	___
	pail	___	___	___*
13:	whale	___	___	___
	cap	___	___	___
14:	big	___	___	___*
	calf	___	___	___
15:	Jack	___	___	___*
	rake	___	___	___*
16:	we	___	___	___*
	catch	___	___	___*

Return to any failed items, giving a second trial. Repeat for Trial 3.

A zero in Trial 3 indicates failure to learn a word-picture association (failure to train).

Words coded * are Test Words.

QUIET SUBTEST

Record the number of the subject's response for each plate. If necessary to stop the test procedure due to slow subject response, place a check (√) under "Pause."

Plate	Test Word	Subj's Resp.	Correct Resp.	Pause
17:	cash	___	(3)■	___
18:	wake	___	(1)◆	___
19:	dig	___	(3)★	___
20:	me	___	(3)●	___
21:	fair	___	(4)■	___
22:	catch	___	(4)▲	___
23:	tack	___	(2)▲	___
24:	rake	___	(1)◆	___
25:	knee	___	(1)●	___
26:	Jack	___	(3)★	___
27:	big	___	(1)★	___
28:	vine	___	(2)◆	___
29:	night	___	(3)●	___
30:	cone	___	(4)●	___
31:	pail	___	(4)▲	___

Plate	Test Word	Subj's Resp.	Correct Resp.	Pause
32:	cap	___	(2)▲	___
33:	bear	___	(4)★	___
34:	lake	___	(3)◆	___
35:	we	___	(4)◆	___
36:	sign	___	(2)■	___
37:	coal	___	(4)◆	___
38:	mail	___	(1)●	___
39:	pack	___	(2)▲	___
40:	sail	___	(4)■	___
41:	bee	___	(4)★	___
42:	shack	___	(3)■	___
43:	tea	___	(4)▲	___
44:	make	___	(2)●	___
45:	back	___	(4)★	___
46:	hair	___	(3)■	___

To score errors, make a slash through the number printed in the "Correct Response" column.

ERROR ANALYSIS

	PLOSIVES	CONTINUANTS	NASALS	
VOICED	★	◆	●	TOTAL VOICED ☐
UNVOICED	▲	■	▨	TOTAL UNVOICED ☐
	TOTAL PLOSIVES ☐	TOTAL CONTINUANTS ☐	TOTAL NASALS ☐	

NOISE SUBTEST

Record the number of the subject's response for each plate. If necessary to stop the test procedure due to slow subject response, place a check (√) under "Pause."

Plate	Test Word	Subj's Resp.	Correct Resp.	Pause
Practice Items:				
47:	light	___		
48:	see	___		
49:	comb	___		
Test Items:				
50:	bear	___	(2)★	___
51:	we	___	(4)◆	___
52:	lake	___	(3)◆	___
53:	coal	___	(4)◆	___
54:	sign	___	(1)■	___
55:	mail	___	(3)●	___
56:	pack	___	(2)▲	___
57:	sail	___	(4)■	___
58:	bee	___	(2)★	___
59:	Jack	___	(3)★	___
60:	knee	___	(2)●	___
61:	big	___	(2)★	___

Plate	Test Word	Subj's Resp.	Correct Resp.	Pause
62:	vine	___	(2)◆	___
63:	night	___	(1)●	___
64:	cone	___	(4)●	___
65:	pail	___	(4)▲	___
66:	cap	___	(2)▲	___
67:	shack	___	(3)■	___
68:	tea	___	(3)▲	___
69:	make	___	(2)●	___
70:	back	___	(3)★	___
71:	hair	___	(1)■	___
72:	cash	___	(3)■	___
73:	wake	___	(1)◆	___
74:	dig	___	(4)★	___
75:	me	___	(4)●	___
76:	fair	___	(2)■	___
77:	catch	___	(3)▲	___
78:	tack	___	(4)▲	___
79:	rake	___	(1)◆	___

To score errors, make a slash through the number printed in the "Correct Response" column.

ERROR ANALYSIS

	PLOSIVES	CONTINUANTS	NASALS	
VOICED	★	◆	●	TOTAL VOICED ☐
UNVOICED	▲	■	▨	TOTAL UNVOICED ☐
	TOTAL PLOSIVES ☐	TOTAL CONTINUANTS ☐	TOTAL NASALS ☐	

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3-500-075

NAME ______________________________

TEACHER ______________________________

SCHOOL ______________________________

GRADE __________ DATE ______________

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Boise Public Schools

SUPPLEMENTARY TESTS - TITLE III 70-13
1971 - 1972

I. Draw-a-Man

II. Ocular Pursuits:

	Horizontal	Vertical	Circular	Fusion
Both eyes				
Right eye				
Left eye				

III. Geometric Forms:

Circle ______________________________

Cross ______________________________

Square ______________________________

Triangle ______________________________

Divided rectangle ______________________________

Vertical diamond ______________________________

Horizontal diamond ______________________________

IV. Left-right:

A. 1. __________
2. __________
3. __________
4. __________
5. __________
6. __________

B. 7. __________
8. __________
9. __________
10. __________

C. 11. ______
12. ______
13. ______
14. ______

D. 15. ______
16. ______

E. 17. ______
18. ______
19. ______
20. ______

A + B = ________
C + D = ________
E = ________
Total ________

V. Oral Commissions:

1. A ____________
B ____________

2. A ____________
B ____________

3. A ____________
B ____________

4. A ____________
B ____________

Total ____________

VI. Body Parts: (+ or -)

1. Shoulders ________
2. Hips ____________
3. Head ____________
4. Ankles __________
5. Ears ____________
6. Feet ____________
7. Eyes ____________
8. Elbows __________
9. Mouth ___________
10. Wrists __________

VII. Dominance:

1. Eye ____________
2. Hand ___________
3. Foot ___________

Patient____________________

Clinician__________________

Date_______________________

Score Sheet for Left-Right Disorientation*

A) Single body parts -- eyes open

1. Show me your left hand. ______
2. " " " right eye. ______
3. " " " right knee. ______
4. " " " left ear. ______
5. " " " right hand. ______
6. " " " left eye. ______

B) Double crossed commands -- eyes open

7. Touch your left ear with your left hand. ________
8. " " right knee with your left hand. ________
9. " " left eye with your right hand. ________
10. " " right ear with your right hand. ________ A+B=____

C) Single body parts -- eyes closed

11. Show me your left ear. ________
12. " " " right hand. ________
13. " " " right eye. ________
14. " " " left knee. ________

D) Double crossed commands -- eyes closed

15. Touch your right ear with your left hand. ________
16. " " left eye with your right hand. ________ C+D=_____

E) Examiner's body parts, seated opposite patient

17. Touch my left ear. ________
18. " " right hand. ________
19. " " left eye. ________
20. " " right ear. ________ E=_______

TOTAL:_____________

Normative Standards for Total and Sub-Section Scores

Age	Total		A=B		M C+D		E	
	M	SD	M	SD	M	SD	M	SD
6	13.1	3.1	7.2	1.7	3.9	1.7	2.1	1.4
7	16.2	2.8	8.7	1.5	5.3	1.2	2.2	1.7
8	17.3	2.0	9.0	1.0	5.6	0.8	2.8	1.6
9	18.3	1.8	9.4	0.9	5.7	0.8	3.2	1.4

By age 12, slightly more accurate performance is achieved. There seems to be no further growth of performance after age 12. By this age then, and through adulthood, we expect practically perfect performance. Most adults make no errors at all. More than 2 errors may considered as defective performance.

*Modified by Arthur L. Benton. Right-Left Discrimination and Finger Agnosia. New York: Hoeber, 1959.

A Copy of the Oral Commissions Subtest of the Detroit Test of Learning Aptitude

Procedures: Say, "I am going to tell you something to do. You listen and do just what I tell you to do after I get all through. Listen."

Give the commissions slowly allowing the subject to do what is requested of him in the test. Avoid any suggestion such as nodding toward or gazing at the object after directions are completed. Give the entire series. (Make certain that you have the subject's full attention. Repetitions of the commands are not allowed unless it is apparent that they were not heard.)

1. a. Show me the window
   b. Stand up straight

2. a. Walk to the door; then bring me that book
   b. Walk to the window; then put this book on a chair.

3. a. Put this pencil on the table; then open the door; then fold you hands behind you.
   b. Bring me that piece of paper; then close the door; then stand on this line

4. a. Walk to the window; then tap the floor once with your foot; then put this penny in my hand; then tell me your name.

   b. Open the door; then put a mark on this paper; then bring me that book; then stand by the window.

Scoring: Give one point for each commission correctly executed if done in correct order with respect for the others of the same group. In a group of three commissions if one only is correct, give one point credit. If two are correct in a set of three in correct order such as first and second, or second and third, or first and third, give two points. If three are in the order of the second, third, and first, give a credit of two points, not allowing credit for the first point which is out of order.

Norms:

Age Level	Raw Score
3-0	2
3-3	2
3-6	3
3-9	4
4-0	4
4-3	5
4-6	6
4-9	6
5-0	7
5-3	8
5-6	9
5-9	10
6-0	11
6-3	12
6-6	13
6-9	14
7-0	15
7-3	16
7-6	17
7-9	18
8-0	19
8-3	20

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

NAME ______________________ BIRTH DATE __________ C.A. ______ GRADE ______

TEACHER ______________________ SCHOOL ______________________________

PRE-TEST DATE __________ POST-TEST DATE __________ TRAINING SESSIONS ______________

PROFILE OF ABILITIES

YEARS AND MONTHS	DEVELOPMENTAL AGES							ITPA SCORES												SCALED SCORES
				Auditory Perception		Reading (Oral)		REPRESENTATIONAL LEVEL						AUTOMATIC LEVEL						
								Reception		Association		Expression		Closure		Sequential Memory		Supplementary Tests		
	CA	MA	PLA	Pre	Post	Pre	Post	Auditory	Visual	Auditory	Visual	Verbal	Manual	Grammatic	Visual	Auditory	Visual	Auditory Closure	Sound Blending	
10-0																				64
9-6																				60
9-0																				56
8-6																				52
8-0																				48
7-6																				44
7-0																				40
6-6																				36
6-0																				32
5-6																				28
5-0																				24
4-6																				20
4-0																				16
3-6																				12
3-0																				8
2-6																				4

Adapted from ITPA Manual, p.97.

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Title III 89-10 70-13

Boise Public Schools

NAME____ BIRTH DATE____________

SCHOOL________________________ GRADE_______ AGE_______

TEACHER'S NAME________________________________ DATE____________________

MEDICAL HISTORY:

1. Is mother RH negative? YES____ NO_____
2. Did mother have German measles or other virus infection during first three months of pregnancy? YES____ NO____
3. Was mother required to take any medication during pregnancy? YES_____ NO_____. If so, please list________________________________

BIRTH HISTORY:

1. Was child born in hospital? YES_____ NO_____
2. Full term_____ Premature_____. If premature, give month____________ weight__________.
3. Prolonged labor_____ Short labor_______
4. Normal birth________ Breech birth________ Caesarean______
5. Was it necessary for forceps to be used? YES______ NO_______
6. Was it necessary to place the child in an incubator? YES_____ NO_____

CHILD'S HISTORY:

1. Did the child have any disease (s) accompanied by an extremely high temperature? YES________ NO_______. If so, name the disease(s) and the age of the child at the time____________________________.
2. Did the child ever have a serious accident? YES_______ NO________
3. At what age did the child crawl________, walk________, talk__________?

FAMILY HISTORY:

1. Please list the names and ages of all of the children in the family starting with the oldest.

Name	Age	Name	Age
1.______________________________	_____	5.______________________________	_____
2.______________________________	_____	6.______________________________	_____
3.______________________________	_____	7.______________________________	_____
4.______________________________	_____	8.______________________________	_____

2. Did the child appear different in any way from the other children in the family? YES________NO________. If so, describe in what way he was different.

3. Does the child receive any kind of medication at the present time?
YES ________NO__________.

Do you wish your child to participate in the Auditory Perceptual and Language Development Training Program? YES______NO______.

____
Parent's Signature

THE INDEPENDENT SCHOOL DISTRICT OF BOISE CITY

ADMINISTRATIVE OFFICES • 1207 FORT ST. • BOISE, IDAHO 83702

1971 - 1972

ESEA TITLE III 89-10 70-13

PARENT EVALUATION OF AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Dear Parents:

Your child was selected to participate in the Auditory Perceptual and Language Development Training Program conducted under an ESEA Title III Grant at______________________School.

The program has been terminated after a period of____________________ weeks training, and your observations of your child will become part of the evaluation of the program.

Have you observed any improvement in the following ways:

1. His ability to understand the spoken word? ____YES ______NO
2. His ability to understand and follow directions? _____YES _____NO
3. His ability to understand and answer questions? _____YES _____NO
4. His attitude toward himself? _____YES _____NO
5. His attitude toward his peers? _____YES _____NO
6. His attitude toward school? _____YES _____NO
7. His attitude toward reading? _____YES _____NO
8. His behavior at home? _____YES _____NO

COMMENTS:

____
Signature

NAME ____________________

TEACHER ____________________

GRADE ____________________

SCHOOL ____________________

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Boise Public Schools
1971 - 1972

TEACHER QUESTIONNAIRE - TITLE III 70-13

IN-SERVICE TRAINING

You have participated in the in-service training program for an extended period, and you have attended workshops with nationally recognized consultants in the field of auditory perception and language development.

In order to evaluate the program, it will be necessary for you to complete the following questionnaire. Please rate yourself in your performance in the following areas: (Circle the most appropriate answer)

CODE: Excellent (E) Very Good (VG) Good (G) Fair (F) Poor (P)

1. Understanding the behavioral symptoms of auditory learning problems sufficiently to identify a child in your classroom that has an auditory perceptual deficit. E VG G F P

2. Using the assessment procedures presented in the workshop to diagnose children with auditory learning problems in your classroom. E VG G F P

3. Suggesting the assessment procedures to other teachers in your school to help them recognize a child with auditory learning problems. E VG G F P

4. Recognizing the need for auditory perceptual training in your classroom. E VG G F P

5. Including more auditory perceptual and language development training in your daily schedule than you did prior to the in-service training. E VG G F P

6. Employing the methods presented in the workshops for training auditory perception and language development in your classroom. E VG G F P

7. Suggesting the training procedures for children with auditory learning problems to other classroom teachers. E VG G F P

8. Changing attitudes of the parents toward their learning disabled children. E VG G F P

9. Reviewing the literature for information on learning disabilities in addition to that presented in the workshops. E VG G F P

AUDITORY PERCEPTUAL AND LANGUAGE
DEVELOPMENT TRAINING PROGRAM

Boise Public Schools

NAME________________________

TEACHER________________________

GRADE________________________

SCHOOL________________________

TEACHER QUESTIONNAIRE - TITLE III 70-13

1971 - 1972

Please write your impressions of the Title III project and the in-service training workshops.

Please list the strengths and weaknesses of the program:

STRENGTHS

1.____

2.____

3.____

4.____

WEAKNESSES

1.____

2.____

3.____

4.____

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

TITLE III 89-10 70-13

DAILY SCHEDULE

School

Clinician

Time	Name	Teacher	Grade

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM
Title III 89-10 70-13

WEEKLY EVALUATION WORKSHEET

THE INDEPENDENT SCHOOL DISTRICT OF BOISE CITY

ADMINISTRATIVE OFFICES • 1207 FORT ST. • BOISE, IDAHO 83702

January 4, 1972

Dear Parents:

Your child is enrolled in the Auditory Perceptual and Language Development Training Program at__________________ School.

In order for you to have an opportunity to observe your child in a training session, an appointment has been scheduled for you to visit your child's class on___________,___________ at____________ at_____________School.

I am looking forward to your spending some time with us in a training session, so that you might more fully understand your child's learning problems and receive some suggestions for help at home.

If it is not possible for you to come for your scheduled appointment, please indicate a time that would be convenient for you.

I shall appreciate your cooperation.

Sincerely,

____

Project Clinician

BOISE SCHOOLS

THE INDEPENDENT SCHOOL DISTRICT OF BOISE CITY

ADMINISTRATIVE OFFICES • 1207 FORT ST. • BOISE, IDAHO 83702

May 24, 1972

Dear Parents:

Your child has participated in the Auditory Perceptual and Language Development Training Program at __________________ School.

In order for me to have an opportunity to discuss your child's progress with you, and make some suggestions for help at home during the summer, an appointment has been scheduled for you on _____________, ______________ at _____________ at ____________________ School.

If it is not possible for you to come for your scheduled appointment, please indicate a time that would be convenient for you.

I shall appreciate your cooperation.

Sincerely,

____

Project Clinician

AUDITORY PERCEPTUAL AND LANGUAGE DEVELOPMENT TRAINING PROGRAM

Title III 89-10 70-13

Boise Public Schools

NAME____________________ BIRTHDATE________ C.A.____ GRADE____

TEACHER____________________ SCHOOL____________________

PRE-TEST DATE________ POST-TEST DATE________ TRAINING SESSIONS________

CLINICIAN____________________ DATE________________

NARRATIVE

APPENDIX B

Yale Charts and Language Forms

Consonant Sounds

(Yale Chart)

h-				
wh	w-			
p	b	m		
t	d	n	l	r-
k ck c	g	ng		
f ph	v			
t'h	t^{2}h			
s c(e) c(i) c(y)	z			
sh			y-	
ch tch	j g(e) g(i) g(y) dge			x-ks qu-kwh

Adapted from Formation and Development of Elementary English Sounds, Carolyn A. Yale, Northampton, Mass: The Clarke School for the Deaf, 1914, p. 10. Reprinted by permission of Alexander Graham Bell Association for the Deaf, © 1946.

Vowel Sounds

(Yale Chart)

$\overset{1}{o}o$ (r)u-e (r)ew	$\overset{2}{o}o$	o-e oa —o $\overset{2}{o}w$	aw au o(r)	-o-
ee -e $e\overset{1}{a}$ e-e	-i- ——y	a-e ai ay	-e- $e\overset{2}{a}$	-a-
	a(r)	-u- —a	ur er ir —ar —or —re	
	i-e igh —y	ou $\overset{1}{o}w$	oi oy	u-e ew

Adapted from Formation and Development of Elementary English Sounds, Carolyn A. Yale, Northampton, Mass; The Clarke School for the Deaf, 1914, p. 11. Reprinted by permission of Alexander Graham Bell Association for the Deaf, © 1946.

How many:	*What color:*
one	red
two	yellow
three	blue
four	white
five	black
six	green
seven	orange
eight	brown
nine	purple
ten	pink
	gray

Who:

a boy

a girl

a man

a woman

a baby

people

Daddy

Mama

Father

Mother

Names of children

a principal

a teacher

a custodian

a nurse

a doctor

a dentist

a barber

a policeman

Santa Claus

What:

arms
eyes
ears
hair
mouth
nose
hands

a tree
a leaf
a flower
a plant
a seed
the grass
the sky

a truck
a train
a bus
a boat
an airplane
a car
a trailer

an apple
an orange
a banana
a grapefruit
a peach
a pear
grapes

What:

a ball
a car
a doll
a drum
a horn
a marble
a block

a bee
a cat
a dog
a fish
a duck
a fly
a puppy

a cap
a coat
a dress
a shoe
a shirt
pants
a belt

a bed
a book
a box
a brush
a comb
a basket
a chair

Where:

on__________

in__________

under________

over__________

to________

at________

around________

between_________

behind________

in front of________

beside__________

off___________

out of_________

Where:

away

downtown

outdoors

home

upstairs

downstairs

When:

Yesterday

Today

Tomorrow

Day before yesterday

Day after tomorrow

After a while

This______

Last________

Next_______

Then________

A long time ago

One day

One day in______

Many years ago_____

All______________

Soon__________

In a little while______

At night__________

At noon____________

Once upon a time_____

Every day____________

The next day_________

Adjectives

big
little

new
old

wide
narrow

tall
short

sour
sweet

asleep
awake

heavy
light

hard
soft

cold
hot

thin
thick

empty
full

high
low

dead
alive

short
long

smooth
rough

small
large

fat
thin

clean
dirty

slow
fast

loud
soft

sharp
dull

Pronouns:

Who:	*Whom:*	*Whose:*	*Whose____?*
I	me	my______	Mine
You	you	your____	Yours
He	him	his_____	His
She	her	her_____	Hers
We	us	our_____	Ours
You	you	your____	Yours
They	them	their___	Theirs

What:	*What:*	*Whose:*
It	it	its_____
They	them	their___

Regular Verb

to walk

PAST	PRESENT	FUTURE
walked	walk walks	shall walk will walk
did not walk	does not walk do not walk	shall not walk will not walk
Did_____walk?	Does_____walk? Do______walk?	Shall______walk? Will________walk?
was walking were walking	am walking is walking are walking	shall be walking will be walking

Irregular Verb

to run

PAST	PRESENT	FUTURE
ran	run runs	shall run will run
did not run	do not run does not run	shall not run will not run
Did______run?	Do______run? Does______run?	Shall_____run? Will________run?
was running were running	am running is running are running	shall be running will be running

Double Verb

to stand up

PAST	PRESENT	FUTURE
stood up	stand up stands up	shall stand up will stand up
did not stand up	do not stand up does not stand up	shall not stand up will not stand up
Did_____stand up?	Do_____stand up? Does______stand up?	Shall______stand up? Will______stand up?
was standing up were standing up	am standing up is standing up are standing up	shall be standing up will be standing up

Auxiliary Verb

to be

PAST	PRESENT	FUTURE
was were	am is are	shall be will be
was not were not	am not is not are not	shall not be will not be
Was________? Were________?	Am______? Is_______? Are_______?	Shall_________? Will_________?
was being were being	am being is being are being	shall be being will be being

Auxiliary Verb

to have

PAST	PRESENT	FUTURE
had	has have	shall have will have
did not have	do not have does not have	shall not have will not have
Did_____have?	Do_______have? Does______have?	Shall_______have? Will_________have?
was having were having	am having is having are having	shall be having will be having

Auxiliary Verb

to do

PAST	PRESENT	FUTURE
did	do does	shall do will do
did not do	do not do does not do	shall not do will not do
Did____do?	Do_____do? Does_____do?	Shall_____do? Will_____do?
was doing were doing	am doing is doing are doing	shall be doing will be doing

IRREGULAR VERBS

PRESENT	PAST
run	ran
stand up	stood up
sit down	sat down
fall	fell
see	saw
drink	drank
eat	ate
tie	tied
bring	brought
put	put
tear	tore
blow	blew
feel	felt
find	found
draw	drew
carry	carried
choose	chose
come	came
bite	bit
go	went
give	gave
lose	lost
hurt	hurt
steal	stole

Who: **What:**		Whom: What:
	=	

Adapted from Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 1949

Whose:	Who: What:		Whom: What:	Whose:	Whom: What:	Where:

Adapted from Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 1949

Whose: Who: What:		What: () Whom: Whose: Whom: What:	Where:	With____: How much:	When:
⌐	= ⊓				⊓

Adapted from Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 1949

Subject:	Verb:	Indirect Object:	Direct Object:	Where:	From____: For____: With____: How: Why:	How far: How often: How long: How much:	When:

Adapted from Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 1949

Whose:	Who: What:		Whom: What:	Whose:	Whom: What:	Where:
	I	walked.				
	Bobby	ran.				
	He	jumped.				
	Sally	stood up.				
	She	sat down.				
	—and I	marched.				
	We	laughed.				
	—and—	bowed.				
	They	skipped.				
	—	threw			a ball.	
	He	bounced			it.	
	—and—	rolled			marbles.	
	They	shot			them.	
	—	put			a book	on a table.
	She	put			a block	on the floor.
	—	held			Jimmy.	
	He	carried			him.	
	—	handed	Mary		a pencil.	
	She	handed	her		a notebook.	
	—	gave	—and—		some candy.	
	He	gave	them		cookies.	

Adapted from Straight Language for the Deaf, Edith Fitzgerald, The Volta Bureau, Washington, D.C. 1949

Whose:	Who: What:			Whom: What:	Whose:	Whom: What:	Where:
		=	⊓				
	I	see				a boy.	
	I	saw				a girl.	
	I	have				brown eyes.	
	I	have				brown hair.	
	Tim	has				blonde hair.	
	He	has				blue eyes.	
	—and—	have				brothers.	
	They	have				sisters.	
	I	am	a girl.				
	I	am	pretty.				
	Fred	is	a boy.				
	He	is	tall.				
	—and—	are	sleepy.				
	They	are	tired				

Additional guides to straight language are written on charts for ready reference:

How many:	*What:*
three	books

What color:	*What:*
black	hair

How many:	*What color:*	*What:*
five	red	apples

Plurals - regular

___________s

__________es

Plurals - irregular

a man	men
a woman	women
a child	children
a baby	babies
a tooth	teeth
a foot	feet
a sheep	sheep
a fish	fish
a mouse	mice
a leaf	leaves
a fly	flies
a puppy	puppies

Classification of nouns under the headings:

Toys

Animals

Clothing

Vegetables

Fruit, etc.

Parts of things:

the back of a chair

the top of a table, etc.

Nouns requiring a modifying phrase:

a piece of_______

a box of_________

a can of_________

a glass of_______

a package of________, etc.

The expletive "There" with *to be*

Too and *either*:

_____went_____   _____did not go________

_____went_____, too   _____did not go, either

One___________, and the other___________.

One___________, and the others__________.

One___________, one__________, and the others___________.

Another________________ One of them __________________

Some of it_____________ Some of them _________________

APPENDIX C

McKinley Project

BOISE PUBLIC SCHOOLS

Boise, Idaho

August 23, 1971

McKinley
School

Dear Parents:

In order to more effectively provide for individual differences in learning, McKinley School is planning a different type of program for first grade pupils this year. To initiate this program special services will be provided at the school during the first week of school beginning August 30. These services will assist us in determining each first grade child's abilities in the areas of vision, hearing, language, motor development, and reading readiness.

Each child and his parent(s) will be scheduled by appointment for one-half day during the week of August 30. ALL first grade children will report for school on Friday morning September 4, from 8:30 until 11:30. Then they will begin on a regular schedule on Tuesday, September 7, at 8:30, when they will be assigned and escorted to their classrooms.

Your scheduled appointment is ____ ____________________________________. If it is not possible for you to bring your child at that time, please call McKinley School 375-5730 for rescheduling.

Please dress your child in comfortable play clothes. Plan to stay at the school for a half day to observe some of the procedures and to participate in the activities planned for the parents.

We are looking forward to your spending one-half day with us, and we shall appreciate your cooperation.

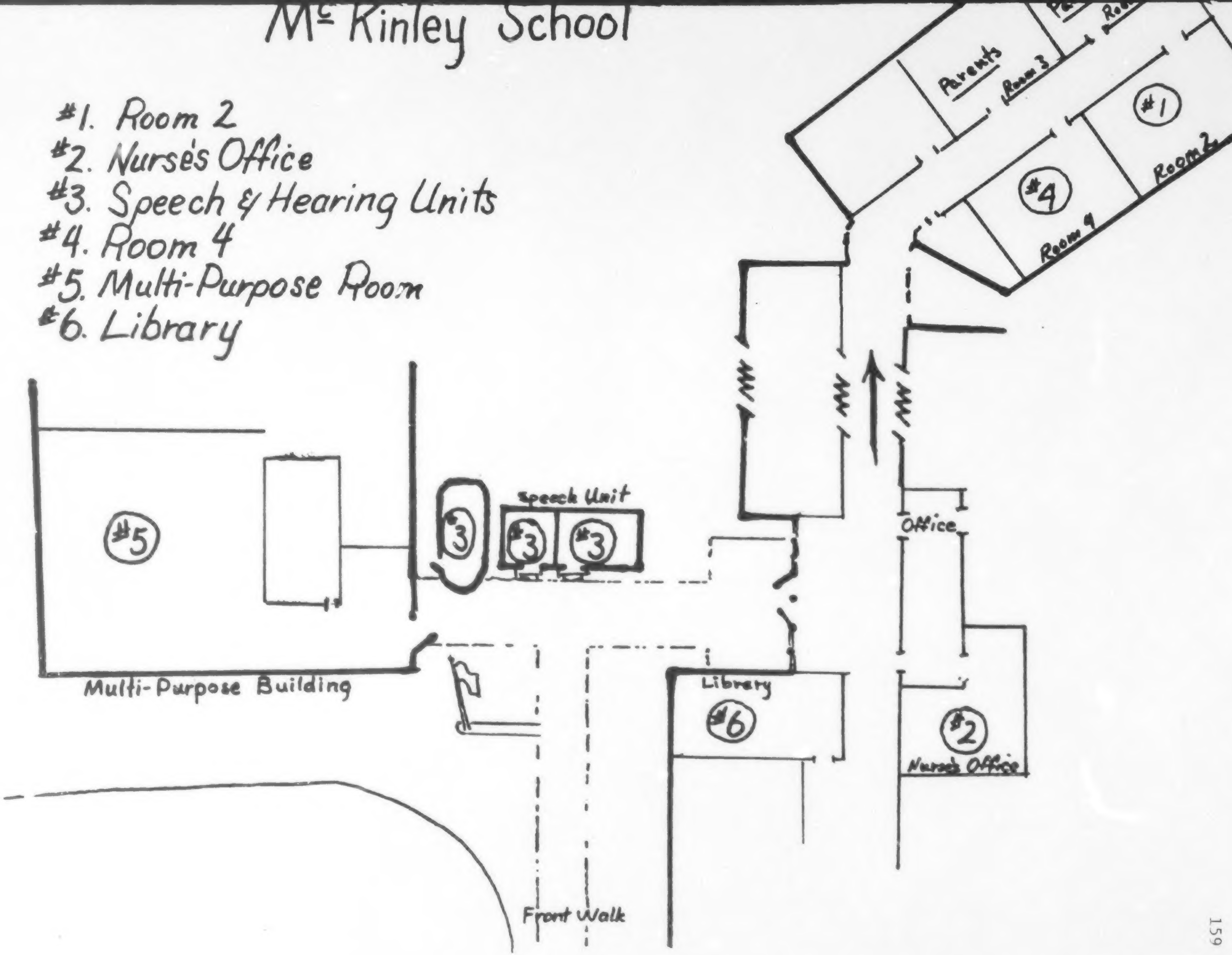
Sincerely,

R Wecker

Robert Wecker, Principal

Mc Kinley School

#1. Room 2
#2. Nurse's Office
#3. Speech & Hearing Units
#4. Room 4
#5. Multi-Purpose Room
#6. Library


Parents
Room 3
#1
#4
Room 2
Room 9
Speech Unit
#3
#3
#3
#5
Office
Library
#6
#2
Nurse's Office
Multi-Purpose Building
Front Walk

PARENT PROGRAM

McKinley School Screening
1971 - 1972

I. Introduction

- A. Explanation of the nature of a learning disability.
- B. Explanation of the new program for first grade children at McKinley School.

II. Film

- A. "Early Recognition of Learning Disabilities"

III. Coffee

IV. Demonstrations

- A. Hearing tests
  - 1. Audiometer - hearing acuity
  - 2. Wepman Auditory Discrimination
  - 3. G.F.W. Auditory Discrimination
- B. Visual tests
  - 1. Snellen - visual acuity
  - 2. Telebinocular - convergence
- C. Materials and methods
- D. Perceptual - Motor Tests

V. Complete Developmental History Form

VI. Refreshments

VII. Meet children

COMPOSITE SCORES

McKinley School
1971 - 1972

PARENTS:______________________________

ADDRESS:______________________________

TELEPHONE:____________________________

NAME:_________________________________

DATE:_________________________________

BIRTHDATE:____________________________

I. Metropolitan:

1. Word Meaning______
2. Listening__________
3. Matching__________
4. Alphabet__________
5. Numbers__________
6. Copying__________
7. Total____________
8. %ile_____________

II. Draw-a-Man:

1. Category__________

III. Language:

1. Receptive_________
2. Expressive________

IV. Wepman:

1. X_________
2. Y_________

V. Hearing:

1. Normal______
2. Retest______

VI. Perceptual Motor:

1. Balance Beam______________
2. Jumping - Hopping__________
3. Visual - Perception________
4. Space - Form______________

VII. Snellen:

1. Left________
2. Right_______
3. Both________

VIII. Telebinoculor:

1. Test 1______
2. Test 2______
3. Test 4______
4. Test 11______

IX. Speech:

1. Normal______
2. Retest______

Parents Permission______

McKinley Preliminary Report

First Grade Screening

1971 - 1972

	Number With Deficits	% With Deficits
I. Metropolitan		
1. Word Meaning	8	9.4
2. Listening	4	4.7
3. Matching	2	2.4
4. Alphabet	6	7.0
5. Numbers	4	4.7
6. Copying	7	8.2
II. Draw-a-Man	34	40.0
III. Language (NSST)		
1. Receptive	21	24.6
2. Expressive	22	26.0
IV. Wepman Auditory Discrimination	30	35.0
V. Hearing Acuity	8	9.4
VI. Speech	8	9.4
VII. Snellen Visual Acuity	4	4.7
VIII. Telebinocular		
1. Convergence	9	10.6
IX. Perceptual Motor	11	13.0
Parents		
1. Problems in School	17	20.0
2. Read Only for Information	21	25.0
3. Permission for Placement	83	97.6
4. Permission slip not returned	2	2.4
TOTAL NUMBER TESTED	85	

SCORES BASED ON TEST NORMS OF INDIVIDUAL TESTS

THE INDEPENDENT SCHOOL DISTRICT OF BOISE CITY
ADMINISTRATIVE OFFICES • 1207 FORT ST. • BOISE, IDAHO 83702

December 7, 1971

Mr. Robert Wecker, Principal
McKinley Elementary School
6400 Overland Road
Boise, Idaho 83705

Dear Mr. Wecker:

The entire project staff of the Title III 89-10 70-13 Auditory Perceptual and Language Development Training Program commends you and your teachers on your implementation of the developmental program in your school as an outgrowth of our Title III project.

It is gratifying that your sincere interest in the education of children with learning problems has led you to submit a proposal for a Title III grant, "Primary Developmental Program," to expand your program to include all of your primary grades.

It is particularly significant that you have also provided for in-service training for all of your primary teachers and for student teachers in the Boise area. Teachers in-service training in auditory perception and language development is sorely needed in our public schools.

Your plan to make your school available as a demonstration school for all interested primary teachers is commendable, and it should serve to create an awareness of learning problems in children, and advance a solution to one of the more serious problems confronting us in education at the present time.

I wish to express my desire to have your program implemented, and I extend my full support to your project.

Sincerely,

Elsie M. Geddes

Elsie M. Geddes
Director, Title III 89-10 70-13

EMG/em